

**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): December 9, 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)
- 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, \$0.001 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

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 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.

On December 9, 2022, the Board of Directors (the “Board”) of Magenta Therapeutics, Inc., a Delaware corporation (the “Company”), approved the amendment and restatement of the By-laws of the Company (the “Second Amended and Restated By-laws”). The Second Amended and Restated By-laws are effective as of December 9, 2022.

The principal revision in the Second Amended and Restated By-laws is to designate the federal district courts of the United States as the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. The previous provision had designated the United States District Court for the District of Massachusetts as the exclusive forum for the resolution of any such complaint.

The foregoing summary does not purport to be complete and is qualified in its entirety by the text of the Second Amended and Restated By-laws, a copy of which is filed herewith as Exhibit 3.1 to this Current Report on Form 8-K and is incorporated by reference into this Item 5.03.

Item 7.01 Regulation FD Disclosure.

On December 12, 2022, the Company issued a press release regarding certain clinical updates to the Company’s MGTA-117 Phase 1/2 clinical trial presented at the American Society of Hematology (ASH) 2022 Annual Meeting and other program updates. 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 Company will host a call and webcast on December 13, 2022 at 8:30 a.m. Eastern Time regarding the foregoing updates. Call details are contained in the press release referenced above. Accompanying slides may be accessed through the “Investors & Media” section of the Company’s website at <https://investor.magentatx.com>. A copy of these slides is furnished as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated herein by reference.

The information in Item 7.01 of this Current Report on Form 8-K (including Exhibit 99.1 and 99.2) 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 8.01 Other Events.

On December 12, 2022, the Company presented preliminary clinical data for its MGTA-117 Phase 1/2 clinical trial in patients with relapsed/refractory acute myeloid leukemia (AML) and myelodysplastic syndrome (MDS) patients.

As of December 1, 2022, a total of 15 participants have been dosed with MGTA-117 in Cohorts 1, 2 and 3. All dosed participants contributed data in whole or in part to the preliminary data set depending on an individual’s availability for collecting assessments. Eleven of the 15 dosed participants completed the dose-limiting toxicity safety observation period of 21 days. None of the four participant discontinuations were deemed to be related to MGTA-117.

MGTA-117 bound to CD117-expressing target cells within 15 minutes after dosing in all participants as measured by a receptor occupancy (RO) assay. RO increased with higher dose levels of MGTA-117. The percentage of occupied CD117 receptors was greater, and the receptor occupancy was more durable at the higher dose levels of Cohorts 2 and 3 as compared to Cohort 1.

MGTA-117 showed greater depletion of target cancer blast cells in the blood of participants in Cohorts 2 and 3 compared to Cohort 1. In addition, three out of the four participants in Cohort 3 for whom paired bone marrow samples were collected at baseline and post-dosing had depletion of cancer blast cells in both blood and bone marrow.

Participants entering the clinical trial were considered ineligible for stem cell transplant and had active and persistent AML/MDS after receiving one or more anti-leukemic therapies. One relapsed/refractory MDS participant in Cohort 3 had a reduction of bone marrow cancer blast cells to a level that enabled the participant to become eligible for transplant. This is the trial’s second participant who became eligible for transplant after a single dose of MGTA-117. The first participant, from Cohort 1, had an approximate 83% reduction of blasts in the bone marrow at day 14 post-dosing (from 6% to 1%) and also progressed to transplant.

MGTA-117 was shown to be rapidly cleared from the body. No MGTA-117 was detectable in the blood 48 hours after dosing in Cohorts 1 and 2, and over 95% of MGTA-117 was cleared in the blood 48 hours after dosing at the higher dose level of Cohort 3. In addition, the MGTA-117 ADC was shown to be stable in blood over time in all participants, and no free payload was detectable in the blood of any participants at any time point.

MGTA-117 was well-tolerated in all participants. No serious adverse events were deemed to be related to MGTA-117, and no dose-limiting toxicities were observed. Treatment-related adverse events deemed to be related to MGTA-117 were low-grade liver enzyme elevations, low-grade fever, and grade 3 and grade 4 leukopenia in two participants who had baseline grade 2 and grade 3 leukopenia, respectively. All instances of observed liver enzyme elevations were low-grade, transient and resolved without intervention. The Phase 1/2 clinical trial is currently enrolling in Cohort 4 (0.13 mg/kg).

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits:

3.1* [Second Amended and Restated By-laws of the Registrant.](#)

99.1** [Press Release dated December 12, 2021.](#)

99.2** [Company Presentation dated December 13, 2022.](#)

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

* Filed herewith.

** Furnished herewith.

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: December 13, 2022

By: /s/ Stephen Mahoney
Stephen Mahoney

Title: Chief Financial and Operating Officer

SECOND AMENDED AND RESTATED**BY-LAWS****OF****MAGENTA THERAPEUTICS, INC.**

(the "Corporation")

ARTICLE IStockholders

SECTION 1. Annual Meeting. The annual meeting of stockholders (any such meeting being referred to in these By-laws as an "Annual Meeting") shall be held at the hour, date and place within or without the United States which is fixed by the Board of Directors, which time, date and place may subsequently be changed at any time by vote of the Board of Directors. If no Annual Meeting has been held for a period of thirteen (13) months after the Corporation's last Annual Meeting, a special meeting in lieu thereof may be held, and such special meeting shall have, for the purposes of these By-laws or otherwise, all the force and effect of an Annual Meeting. Any and all references hereafter in these By-laws to an Annual Meeting or Annual Meetings also shall be deemed to refer to any special meeting(s) in lieu thereof.

SECTION 2. Notice of Stockholder Business and Nominations.(a) Annual Meetings of Stockholders.

(1) Nominations of persons for election to the Board of Directors of the Corporation and the proposal of other business to be considered by the stockholders may be brought before an Annual Meeting (i) by or at the direction of the Board of Directors or (ii) by any stockholder of the Corporation who was a stockholder of record at the time of giving of notice provided for in this By-law, who is entitled to vote at the meeting, who is present (in person or by proxy) at the meeting and who complies with the notice procedures set forth in this By-law as to such nomination or business. For the avoidance of doubt, the foregoing clause (ii) shall be the exclusive means for a stockholder to bring nominations or business properly before an Annual Meeting (other than matters properly brought under Rule 14a-8 (or any successor rule) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), and such stockholder must comply with the notice and other procedures set forth in Article I, Section 2(a)(2) and (3) of this By-law to bring such nominations or business properly before an Annual Meeting. In addition to the other requirements set forth in this By-law, for any proposal of business to be considered at an Annual Meeting, it must be a proper subject for action by stockholders of the Corporation under Delaware law.

(2) For nominations or other business to be properly brought before an Annual Meeting by a stockholder pursuant to clause (ii) of Article I, Section 2(a)(1) of this By-law, the stockholder must (i) have given Timely Notice (as defined below) thereof in writing to the Secretary of the Corporation, (ii) have provided any updates or supplements to such notice at the times and in the forms required by this By-law and (iii) together with the beneficial owner(s), if any, on whose behalf the nomination or business proposal is made, have acted in accordance with the representations set forth in the Solicitation Statement (as defined below) required by this By-law. To be timely, a stockholder's written notice shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the one-year anniversary of the preceding year's Annual Meeting; provided, however, that in the event the Annual Meeting is first convened more than thirty (30) days before or more than sixty (60) days after such anniversary date, or if no Annual Meeting were held in the preceding year, notice by the stockholder to be timely must be received by the Secretary of the Corporation not later than the close of business on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made (such notice within such time periods shall be referred to as "Timely Notice"). Notwithstanding anything to the contrary provided herein, for the first Annual Meeting following the initial public offering of common stock of the Corporation, a stockholder's notice shall be timely if received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such Annual Meeting is first made or sent by the Corporation. Such stockholder's Timely Notice shall set forth:

(A) as to each person whom the stockholder proposes to nominate for election or reelection as a director, (i) the name, age, business address and residence address of the nominee, (ii) the principal occupation or employment of the nominee, (iii) the class and number of shares of the corporation that are held of record or are beneficially owned by the nominee and any derivative positions held or beneficially held by the nominee, (iv) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of the nominee with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or to manage the risk or benefit of share price changes for, or to increase or decrease the voting power of the nominee, (v) a description of all arrangements or understandings between or among the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder or concerning the nominee's potential service on the Board of Directors, (vi) a written statement executed by the nominee acknowledging that as a director of the corporation, the nominee will owe fiduciary duties under Delaware law with respect to the corporation and its stockholders, and (vii) all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected);

(B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, the text, if any, of any resolutions or By-law amendment proposed for adoption, and any material interest in such business of each Proposing Person (as defined below);

(C) (i) the name and address of the stockholder giving the notice, as they appear on the Corporation's books, and the names and addresses of the other Proposing Persons (if any) and (ii) as to each Proposing Person, the following information: (a) the class or series and number of all shares of capital stock of the Corporation which are, directly or indirectly, owned beneficially or of record by such Proposing Person or any of its affiliates or associates (as such terms are defined in Rule 12b-2 promulgated under the Exchange Act), including any shares of any class or series of capital stock of the Corporation as to which such Proposing Person or any of its affiliates or associates has a right to acquire beneficial ownership at any time in the future, (b) all Synthetic Equity Interests (as defined below) in which such Proposing Person or any of its affiliates or associates, directly or indirectly, holds an interest including a description of the material terms of each such Synthetic Equity Interest, including without limitation, identification of the counterparty to each such Synthetic Equity Interest and disclosure, for each such Synthetic Equity Interest, as to (x) whether or not such Synthetic Equity Interest conveys any voting rights, directly or indirectly, in such shares to such Proposing Person, (y) whether or not such Synthetic Equity Interest is required to be, or is capable of being, settled through delivery of such shares and (z) whether or not such Proposing Person and/or, to the extent known, the counterparty to such Synthetic Equity Interest has entered into other transactions that hedge or mitigate the economic effect of such Synthetic Equity Interest, (c) any proxy (other than a revocable proxy given in response to a public proxy solicitation made pursuant to, and in accordance with, the Exchange Act), agreement, arrangement, understanding or relationship pursuant to which such Proposing Person has or shares a right to, directly or indirectly, vote any shares of any class or series of capital stock of the Corporation, (d) any rights to dividends or other distributions on the shares of any class or series of capital stock of the Corporation, directly or indirectly, owned beneficially by such Proposing Person that are separated or separable from the underlying shares of the Corporation, and (e) any performance-related fees (other than an asset based fee) that such Proposing Person, directly or indirectly, is entitled to based on any increase or decrease in the value of shares of any class or series of capital stock of the Corporation or any Synthetic Equity Interests (the disclosures to be made pursuant to the foregoing clauses (a) through (e) are referred to, collectively, as "Material Ownership Interests") and (iii) a description of the material terms of all agreements, arrangements or understandings (whether or not in writing) entered into by any Proposing Person or any of its affiliates or associates with any other person for the purpose of acquiring, holding, disposing or voting of any shares of any class or series of capital stock of the Corporation;

(D) (i) a description of all agreements, arrangements or understandings by and among any of the Proposing Persons, or by and among any Proposing Persons and any other person (including with any proposed nominee(s)) pertaining to the nomination(s) or other business proposed to be brought before the meeting of stockholders (which description shall identify the name of each other person who is party to such an agreement, arrangement or understanding), and (ii) identification of the names and addresses of other stockholders (including beneficial owners) known by any of the Proposing Persons to support such nominations or other business proposal(s), and to the extent known the class and number of all shares of the Corporation's capital stock owned beneficially or of record by such other stockholder(s) or other beneficial owner(s); and

(E) a statement whether or not the stockholder giving the notice and/or the other Proposing Person(s), if any, will deliver a proxy statement and form of proxy to holders of, in the case of a business proposal, at least the percentage of voting power of all of the shares of capital stock of the Corporation required under applicable law to approve the proposal or, in the case of a nomination or nominations, at least the percentage of voting power of all of the shares of capital stock of the Corporation reasonably believed by such Proposing Person to be sufficient to elect the nominee or nominees proposed to be nominated by such stockholder (such statement, the "Solicitation Statement").

For purposes of this Article I of these By-laws, the term "Proposing Person" shall mean the following persons: (i) the stockholder of record providing the notice of nominations or business proposed to be brought before a stockholders' meeting, and (ii) the beneficial owner(s), if different, on whose behalf the nominations or business proposed to be brought before a stockholders' meeting is made. For purposes of this Section 2 of Article I of these By-laws, the term "Synthetic Equity Interest" shall mean any transaction, agreement or arrangement (or series of transactions, agreements or arrangements), including, without limitation, any derivative, swap, hedge, repurchase or so-called "stock borrowing" agreement or arrangement, the purpose or effect of which is to, directly or indirectly: (a) give a person or entity economic benefit and/or risk similar to ownership of shares of any class or series of capital stock of the Corporation, in whole or in part, including due to the fact that such transaction, agreement or arrangement provides, directly or indirectly, the opportunity to profit or avoid a loss from any increase or decrease in the value of any shares of any class or series of capital stock of the Corporation, (b) mitigate loss to, reduce the economic risk of or manage the risk of share price changes for, any person or entity with respect to any shares of any class or series of capital stock of the Corporation, (c) otherwise provide in any manner the opportunity to profit or avoid a loss from any decrease in the value of any shares of any class or series of capital stock of the Corporation, or (d) increase or decrease the voting power of any person or entity with respect to any shares of any class or series of capital stock of the Corporation.

(3) A stockholder providing Timely Notice of nominations or business proposed to be brought before an Annual Meeting shall further update and supplement such notice, if necessary, so that the information (including, without limitation, the Material Ownership Interests information) provided or required to be provided in such notice pursuant to this By-law shall be true and correct as of the record date for the meeting and as of the date that is ten (10) business days prior to such Annual Meeting, and such update and supplement shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the fifth (5th) business day after the record date for the Annual Meeting (in the case of the update and supplement required to be made as of the record date), and not later than the close of business on the eighth (8th) business day prior to the date of the Annual Meeting (in the case of the update and supplement required to be made as of ten (10) business days prior to the meeting).

(4) Notwithstanding anything in the second sentence of Article I, Section 2(a)(2) of this By-law to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Corporation is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the Corporation at least ten (10) days before the last day a stockholder may deliver a notice of nomination in accordance with the second sentence of Article I, Section 2(a)(2), a stockholder's notice required by this By-law shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be received by the Secretary of the Corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the Corporation.

(b) General.

(1) Only such persons who are nominated in accordance with the provisions of this By-law shall be eligible for election and to serve as directors and only such business shall be conducted at an Annual Meeting as shall have been brought before the meeting in accordance with the provisions of this By-law or in accordance with Rule 14a-8 under the Exchange Act. The Board of Directors or a designated committee thereof shall have the power to determine whether a nomination or any business proposed to be brought before the meeting was made in accordance with the provisions of this By-law. If neither the Board of Directors nor such designated committee makes a determination as to whether any stockholder proposal or nomination was made in accordance with the provisions of this By-law, the presiding officer of the Annual Meeting shall have the power and duty to determine whether the stockholder proposal or nomination was made in accordance with the provisions of this By-law. If the Board of Directors or a designated committee thereof or the presiding officer, as applicable, determines that any stockholder proposal or nomination was not made in accordance with the provisions of this By-law, such proposal or nomination shall be disregarded and shall not be presented for action at the Annual Meeting.

(2) Except as otherwise required by law, nothing in this Article I, Section 2 shall obligate the Corporation or the Board of Directors to include in any proxy statement or other stockholder communication distributed on behalf of the Corporation or the Board of Directors information with respect to any nominee for director or any other matter of business submitted by a stockholder.

(3) Notwithstanding the foregoing provisions of this Article I, Section 2, if the nominating or proposing stockholder (or a qualified representative of the stockholder) does not appear at the Annual Meeting to present a nomination or any business, such nomination or business shall be disregarded, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Article I, Section 2, to be considered a qualified representative of the proposing stockholder, a person must be authorized by a written instrument executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such written instrument or electronic transmission, or a reliable reproduction of the written instrument or electronic transmission, to the presiding officer at the meeting of stockholders.

(4) For purposes of this By-law, “public announcement” shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(5) Notwithstanding the foregoing provisions of this By-law, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this By-law. Nothing in this By-law shall be deemed to affect any rights of (i) stockholders to have proposals included in the Corporation’s proxy statement pursuant to Rule 14a-8 (or any successor rule), as applicable, under the Exchange Act and, to the extent required by such rule, have such proposals considered and voted on at an Annual Meeting or (ii) the holders of any series of Undesignated Preferred Stock to elect directors under specified circumstances.

SECTION 3. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Undesignated Preferred Stock, special meetings of the stockholders of the Corporation may be called only by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the Directors then in office. The Board of Directors may postpone or reschedule any previously scheduled special meeting of stockholders. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation. Nominations of persons for election to the Board of Directors of the Corporation and stockholder proposals of other business shall not be brought before a special meeting of stockholders to be considered by the stockholders unless such special meeting is held in lieu of an annual meeting of stockholders in accordance with Article I, Section 1 of these By-laws, in which case such special meeting in lieu thereof shall be deemed an Annual Meeting for purposes of these By-laws and the provisions of Article I, Section 2 of these By-laws shall govern such special meeting.

SECTION 4. Notice of Meetings; Adjournments.

(a) A notice of each Annual Meeting stating the hour, date and place, if any, of such Annual Meeting and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, shall be given not less than ten (10) days nor more than sixty (60) days before the Annual Meeting, to each stockholder entitled to vote thereat by delivering such notice to such stockholder or by mailing it, postage prepaid, addressed to such stockholder at the address of such stockholder as it appears on the Corporation's stock transfer books. Without limiting the manner by which notice may otherwise be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the Delaware General Corporation Law ("DGCL").

(b) Unless otherwise required by the DGCL, notice of all special meetings of stockholders shall be given in the same manner as provided for Annual Meetings, except that the notice of all special meetings shall state the purpose or purposes for which the meeting has been called.

(c) Notice of an Annual Meeting or special meeting of stockholders need not be given to a stockholder if a waiver of notice is executed, or waiver of notice by electronic transmission is provided, before or after such meeting by such stockholder or if such stockholder attends such meeting, unless such attendance is for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting was not lawfully called or convened.

(d) The Board of Directors may postpone and reschedule any previously scheduled Annual Meeting or special meeting of stockholders and any record date with respect thereto, regardless of whether any notice or public disclosure with respect to any such meeting has been sent or made pursuant to Section 2 of this Article I of these By-laws or otherwise. In no event shall the public announcement of an adjournment, postponement or rescheduling of any previously scheduled meeting of stockholders commence a new time period for the giving of a stockholder's notice under this Article I of these By-laws.

(e) When any meeting is convened, the presiding officer may adjourn the meeting if (i) no quorum is present for the transaction of business, (ii) the Board of Directors determines that adjournment is necessary or appropriate to enable the stockholders to consider fully information which the Board of Directors determines has not been made sufficiently or timely available to stockholders, or (iii) the Board of Directors determines that adjournment is otherwise in the best interests of the Corporation. When any Annual Meeting or special meeting of stockholders is adjourned to another hour, date or place, notice need not be given of the adjourned meeting other than an announcement at the meeting at which the adjournment is taken of the hour, date and place, if any, to which the meeting is adjourned and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting; provided, however, that if the adjournment is for more than thirty (30) days from the meeting date, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting shall be given to each stockholder of record entitled to vote thereat and each stockholder who, by law or under the Certificate of Incorporation of the Corporation (as the same may hereafter be amended and/or restated, the "Certificate") or these By-laws, is entitled to such notice.

SECTION 5. Quorum. A majority of the shares entitled to vote, present in person or represented by proxy, shall constitute a quorum at any meeting of stockholders. If less than a quorum is present at a meeting, the holders of voting stock representing a majority of the voting power present at the meeting or the presiding officer may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice, except as provided in Section 4 of this Article I. At such adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally noticed. The stockholders present at a duly constituted meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

SECTION 6. Voting and Proxies. Stockholders shall have one vote for each share of stock entitled to vote owned by them of record according to the stock ledger of the Corporation as of the record date, unless otherwise provided by law or by the Certificate. Stockholders may vote either (i) in person, (ii) by written proxy or (iii) by a transmission permitted by Section 212(c) of the DGCL. Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission permitted by Section 212(c) of the DGCL may be substituted for or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission. Proxies shall be filed in accordance with the procedures established for the meeting of stockholders. Except as otherwise limited therein or as otherwise provided by law, proxies authorizing a person to vote at a specific meeting shall entitle the persons authorized thereby to vote at any adjournment of such meeting, but they shall not be valid after final adjournment of such meeting. A proxy with respect to stock held in the name of two or more persons shall be valid if executed by or on behalf of any one of them unless at or prior to the exercise of the proxy the Corporation receives a specific written notice to the contrary from any one of them.

SECTION 7. Action at Meeting. When a quorum is present at any meeting of stockholders, any matter before any such meeting (other than an election of a director or directors) shall be decided by a majority of the votes properly cast for and against such matter, except where a larger vote is required by law, by the Certificate or by these By-laws. Any election of directors by stockholders shall be determined by a plurality of the votes properly cast on the election of directors.

SECTION 8. Stockholder Lists. The Secretary or an Assistant Secretary (or the Corporation's transfer agent or other person authorized by these By-laws or by law) shall prepare and make, at least ten (10) days before every Annual Meeting or special meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for a period of at least ten (10) days prior to the meeting in the manner provided by law. The list shall also be open to the examination of any stockholder during the whole time of the meeting as provided by law.

SECTION 9. Presiding Officer. The Board of Directors shall designate a representative to preside over all Annual Meetings or special meetings of stockholders, provided that if the Board of Directors does not so designate such a presiding officer, then the Chairman of the Board, if one is elected, shall preside over such meetings. If the Board of Directors does not so designate such a presiding officer and there is no Chairman of the Board or the Chairman of the Board is unable to so preside or is absent, then the Chief Executive Officer, if one is elected, shall preside over such meetings, provided further that if there is no Chief Executive Officer or the Chief Executive Officer is unable to so preside or is absent, then the President shall preside over such meetings. The presiding officer at any Annual Meeting or special meeting of stockholders shall have the power, among other things, to adjourn such meeting at any time and from time to time, subject to Sections 4 and 5 of this Article I. The order of business and all other matters of procedure at any meeting of the stockholders shall be determined by the presiding officer.

SECTION 10. Inspectors of Elections. The Corporation shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the presiding officer shall appoint one or more inspectors to act at the meeting. Any inspector may, but need not, be an officer, employee or agent of the Corporation. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall perform such duties as are required by the DGCL, including the counting of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors. The presiding officer may review all determinations made by the inspectors, and in so doing the presiding officer shall be entitled to exercise his or her sole judgment and discretion and he or she shall not be bound by any determinations made by the inspectors. All determinations by the inspectors and, if applicable, the presiding officer, shall be subject to further review by any court of competent jurisdiction.

ARTICLE II

Directors

SECTION 1. Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors except as otherwise provided by the Certificate or required by law.

SECTION 2. Number and Terms. The number of directors of the Corporation shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors. The directors shall hold office in the manner provided in the Certificate.

SECTION 3. Qualification. No director need be a stockholder of the Corporation.

SECTION 4. Vacancies. Vacancies in the Board of Directors shall be filled in the manner provided in the Certificate.

SECTION 5. Removal. Directors may be removed from office only in the manner provided in the Certificate.

SECTION 6. Resignation. A director may resign at any time by electronic transmission or by giving written notice to the Chairman of the Board, if one is elected, the President or the Secretary. A resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 7. Regular Meetings. The regular annual meeting of the Board of Directors shall be held, without notice other than this Section 7, on the same date and at the same place as the Annual Meeting following the close of such meeting of stockholders. Other regular meetings of the Board of Directors may be held at such hour, date and place as the Board of Directors may by resolution from time to time determine and publicize by means of reasonable notice given to any director who is not present at the meeting at which such resolution is adopted.

SECTION 8. Special Meetings. Special meetings of the Board of Directors may be called, orally or in writing, by or at the request of a majority of the directors, the Chairman of the Board, if one is elected, or the President. The person calling any such special meeting of the Board of Directors may fix the hour, date and place thereof.

SECTION 9. Notice of Meetings. Notice of the hour, date and place of all special meetings of the Board of Directors shall be given to each director by the Secretary or an Assistant Secretary, or in case of the death, absence, incapacity or refusal of such persons, by the Chairman of the Board, if one is elected, or the President or such other officer designated by the Chairman of the Board, if one is elected, or the President. Notice of any special meeting of the Board of Directors shall be given to each director in person, by telephone, or by facsimile, electronic mail or other form of electronic communication, sent to his or her business or home address, at least twenty-four (24) hours in advance of the meeting, or by written notice mailed to his or her business or home address, at least forty-eight (48) hours in advance of the meeting. Such notice shall be deemed to be delivered when hand-delivered to such address, read to such director by telephone, deposited in the mail so addressed, with postage thereon prepaid if mailed, dispatched or transmitted if sent by facsimile transmission or by electronic mail or other form of electronic communications. A written waiver of notice signed or electronically transmitted before or after a meeting by a director and filed with the records of the meeting shall be deemed to be equivalent to notice of the meeting. The attendance of a director at a meeting shall

constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because such meeting is not lawfully called or convened. Except as otherwise required by law, by the Certificate or by these By-laws, neither the business to be transacted at, nor the purpose of, any meeting of the Board of Directors need be specified in the notice or waiver of notice of such meeting.

SECTION 10. Quorum. At any meeting of the Board of Directors, a majority of the total number of directors shall constitute a quorum for the transaction of business, but if less than a quorum is present at a meeting, a majority of the directors present may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice. Any business which might have been transacted at the meeting as originally noticed may be transacted at such adjourned meeting at which a quorum is present. For purposes of this section, the total number of directors includes any unfilled vacancies on the Board of Directors.

SECTION 11. Action at Meeting. At any meeting of the Board of Directors at which a quorum is present, the vote of a majority of the directors present shall constitute action by the Board of Directors, unless otherwise required by law, by the Certificate or by these By-laws.

SECTION 12. Action by Consent. Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting if all members of the Board of Directors consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the records of the meetings of the Board of Directors. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form. Such consent shall be treated as a resolution of the Board of Directors for all purposes.

SECTION 13. Manner of Participation. Directors may participate in meetings of the Board of Directors by means of conference telephone or other communications equipment by means of which all directors participating in the meeting can hear each other, and participation in a meeting in accordance herewith shall constitute presence in person at such meeting for purposes of these By-laws.

SECTION 14. Presiding Director. The Board of Directors shall designate a representative to preside over all meetings of the Board of Directors, provided that if the Board of Directors does not so designate such a presiding director or such designated presiding director is unable to so preside or is absent, then the Chairman of the Board, if one is elected, shall preside over all meetings of the Board of Directors. If both the designated presiding director, if one is so designated, and the Chairman of the Board, if one is elected, are unable to preside or are absent, the Board of Directors shall designate an alternate representative to preside over a meeting of the Board of Directors.

SECTION 15. Committees. The Board of Directors, by vote of a majority of the directors then in office, may elect one or more committees, including, without limitation, a Compensation Committee, a Nominating & Corporate Governance Committee and an Audit Committee, and may delegate thereto some or all of its powers except those which by law, by the Certificate or by these By-laws may not be delegated. Except as the Board of Directors may otherwise determine, any such committee may make rules for the conduct of its business, but unless otherwise provided by the Board of Directors or in such rules, its business shall be conducted so far as possible in the same manner as is provided by these By-laws for the Board of Directors. All members of such committees shall hold such offices at the pleasure of the Board of Directors. The Board of Directors may abolish any such committee at any time. Any committee to which the Board of Directors delegates any of its powers or duties shall keep records of its meetings and shall report its action to the Board of Directors.

SECTION 16. Compensation of Directors. Directors shall receive such compensation for their services as shall be determined by a majority of the Board of Directors, or a designated committee thereof, provided that directors who are serving the Corporation as employees and who receive compensation for their services as such, shall not receive any salary or other compensation for their services as directors of the Corporation.

ARTICLE III

Officers

SECTION 1. Enumeration. The officers of the Corporation shall consist of a President, a Treasurer, a Secretary and such other officers, including, without limitation, a Chairman of the Board of Directors, a Chief Executive Officer and one or more Vice Presidents (including Executive Vice Presidents or Senior Vice Presidents), Assistant Vice Presidents, Assistant Treasurers and Assistant Secretaries, as the Board of Directors may determine.

SECTION 2. Election. At the regular annual meeting of the Board of Directors following the Annual Meeting, the Board of Directors shall elect the President, the Treasurer and the Secretary. Other officers may be elected by the Board of Directors at such regular annual meeting of the Board of Directors or at any other regular or special meeting.

SECTION 3. Qualification. No officer need be a stockholder or a director. Any person may occupy more than one office of the Corporation at any time.

SECTION 4. Tenure. Except as otherwise provided by the Certificate or by these By-laws, each of the officers of the Corporation shall hold office until the regular annual meeting of the Board of Directors following the next Annual Meeting and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

SECTION 5. Resignation. Any officer may resign by delivering his or her written or electronically transmitted resignation to the Corporation addressed to the President or the Secretary, and such resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 6. Removal. Except as otherwise provided by law or by resolution of the Board of Directors, the Board of Directors may remove any officer with or without cause by the affirmative vote of a majority of the directors then in office.

SECTION 7. Absence or Disability. In the event of the absence or disability of any officer, the Board of Directors may designate another officer to act temporarily in place of such absent or disabled officer.

SECTION 8. Vacancies. Any vacancy in any office may be filled for the unexpired portion of the term by the Board of Directors.

SECTION 9. President. The President shall, subject to the direction of the Board of Directors, have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 10. Chairman of the Board. The Chairman of the Board, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 11. Chief Executive Officer. The Chief Executive Officer, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 12. Vice Presidents and Assistant Vice Presidents. Any Vice President (including any Executive Vice President or Senior Vice President) and any Assistant Vice President shall have such powers and shall perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 13. Treasurer and Assistant Treasurers. The Treasurer shall, subject to the direction of the Board of Directors and except as the Board of Directors or the Chief Executive Officer may otherwise provide, have general charge of the financial affairs of the Corporation and shall cause to be kept accurate books of account. The Treasurer shall have custody of all funds, securities, and valuable documents of the Corporation. He or she shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. Any Assistant Treasurer shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 14. Secretary and Assistant Secretaries. The Secretary shall record all the proceedings of the meetings of the stockholders and the Board of Directors (including committees of the Board of Directors) in books kept for that purpose. In his or her absence from any such meeting, a temporary secretary chosen at the meeting shall record the proceedings thereof. The Secretary shall have charge of the stock ledger (which may, however, be kept by any transfer or other agent of the Corporation). The Secretary shall have custody of the seal of the Corporation, and the Secretary, or an Assistant Secretary shall have authority to affix it to

any instrument requiring it, and, when so affixed, the seal may be attested by his or her signature or that of an Assistant Secretary. The Secretary shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. In the absence of the Secretary, any Assistant Secretary may perform his or her duties and responsibilities. Any Assistant Secretary shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 15. Other Powers and Duties. Subject to these By-laws and to such limitations as the Board of Directors may from time to time prescribe, the officers of the Corporation shall each have such powers and duties as generally pertain to their respective offices, as well as such powers and duties as from time to time may be conferred by the Board of Directors or the Chief Executive Officer.

ARTICLE IV

Capital Stock

SECTION 1. Certificates of Stock. Each stockholder shall be entitled to a certificate of the capital stock of the Corporation in such form as may from time to time be prescribed by the Board of Directors. Such certificate shall be signed by any two authorized officers of the Corporation. The Corporation seal and the signatures by the Corporation's officers, the transfer agent or the registrar may be facsimiles. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer, transfer agent or registrar at the time of its issue. Every certificate for shares of stock which are subject to any restriction on transfer and every certificate issued when the Corporation is authorized to issue more than one class or series of stock shall contain such legend with respect thereto as is required by law. Notwithstanding anything to the contrary provided in these Bylaws, the Board of Directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares (except that the foregoing shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation), and by the approval and adoption of these Bylaws the Board of Directors has determined that all classes or series of the Corporation's stock may be uncertificated, whether upon original issuance, re-issuance, or subsequent transfer.

SECTION 2. Transfers. Subject to any restrictions on transfer and unless otherwise provided by the Board of Directors, shares of stock that are represented by a certificate may be transferred on the books of the Corporation by the surrender to the Corporation or its transfer agent of the certificate theretofore properly endorsed or accompanied by a written assignment or power of attorney properly executed, with transfer stamps (if necessary) affixed, and with such proof of the authenticity of signature as the Corporation or its transfer agent may reasonably require. Shares of stock that are not represented by a certificate may be transferred on the books of the Corporation by submitting to the Corporation or its transfer agent such evidence of transfer and following such other procedures as the Corporation or its transfer agent may require.

SECTION 3. Record Holders. Except as may otherwise be required by law, by the Certificate or by these By-laws, the Corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock, until the shares have been transferred on the books of the Corporation in accordance with the requirements of these By-laws.

SECTION 4. Record Date. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date: (a) in the case of determination of stockholders entitled to vote at any meeting of stockholders, shall, unless otherwise required by law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting and (b) in the case of any other action, shall not be more than sixty (60) days prior to such other action. If no record date is fixed: (i) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held; and (ii) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

SECTION 5. Replacement of Certificates. In case of the alleged loss, destruction or mutilation of a certificate of stock of the Corporation, a duplicate certificate may be issued in place thereof, upon such terms as the Board of Directors may prescribe.

ARTICLE V

Indemnification

SECTION 1. Definitions. For purposes of this Article:

(a) "Corporate Status" describes the status of a person who is serving or has served (i) as a Director of the Corporation, (ii) as an Officer of the Corporation, (iii) as a Non-Officer Employee of the Corporation, or (iv) as a director, partner, trustee, officer, employee or agent of any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan, foundation, association, organization or other legal entity which such person is or was serving at the request of the Corporation. For purposes of this Section 1(a), a Director, Officer or Non-Officer Employee of the Corporation who is serving or has served as a director, partner, trustee, officer, employee or agent of a Subsidiary shall be deemed to be serving at the request of the Corporation. Notwithstanding the foregoing, "Corporate Status" shall not include the status of a person who is serving or has served as a director, officer, employee or agent of a constituent corporation absorbed in a merger or consolidation transaction with the Corporation with respect to such person's activities prior to said transaction, unless specifically authorized by the Board of Directors or the stockholders of the Corporation;

(b) "Director" means any person who serves or has served the Corporation as a director on the Board of Directors of the Corporation;

(c) "Disinterested Director" means, with respect to each Proceeding in respect of which indemnification is sought hereunder, a Director of the Corporation who is not and was not a party to such Proceeding;

(d) "Expenses" means all attorneys' fees, retainers, court costs, transcript costs, fees of expert witnesses, private investigators and professional advisors (including, without limitation, accountants and investment bankers), travel expenses, duplicating costs, printing and binding costs, costs of preparation of demonstrative evidence and other courtroom presentation aids and devices, costs incurred in connection with document review, organization, imaging and computerization, telephone charges, postage, delivery service fees, and all other disbursements, costs or expenses of the type customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, settling or otherwise participating in, a Proceeding;

(e) "Liabilities" means judgments, damages, liabilities, losses, penalties, excise taxes, fines and amounts paid in settlement;

(f) "Non-Officer Employee" means any person who serves or has served as an employee or agent of the Corporation, but who is not or was not a Director or Officer;

(g) "Officer" means any person who serves or has served the Corporation as an officer of the Corporation appointed by the Board of Directors of the Corporation;

(h) "Proceeding" means any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, inquiry, investigation, administrative hearing or other proceeding, whether civil, criminal, administrative, arbitral or investigative; and

(i) "Subsidiary" shall mean any corporation, partnership, limited liability company, joint venture, trust or other entity of which the Corporation owns (either directly or through or together with another Subsidiary of the Corporation) either (i) a general partner, managing member or other similar interest or (ii) (A) fifty percent (50%) or more of the voting power of the voting capital equity interests of such corporation, partnership, limited liability company, joint venture or other entity, or (B) fifty percent (50%) or more of the outstanding voting capital stock or other voting equity interests of such corporation, partnership, limited liability company, joint venture or other entity.

SECTION 2. Indemnification of Directors and Officers.

(a) Subject to the operation of Section 4 of this Article V of these By-laws, each Director and Officer shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), and to the extent authorized in this Section 2.

(1) Actions, Suits and Proceedings Other than By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses and Liabilities that are incurred or paid by such Director or Officer or on such Director's or Officer's behalf in connection with any Proceeding or any claim, issue or matter therein (other than an action by or in the right of the Corporation), which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director's or Officer's Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful.

(2) Actions, Suits and Proceedings By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses that are incurred by such Director or Officer or on such Director's or Officer's behalf in connection with any Proceeding or any claim, issue or matter therein by or in the right of the Corporation, which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director's or Officer's Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation; provided, however, that no indemnification shall be made under this Section 2(a)(2) in respect of any claim, issue or matter as to which such Director or Officer shall have been finally adjudged by a court of competent jurisdiction to be liable to the Corporation, unless, and only to the extent that, the Court of Chancery or another court in which such Proceeding was brought shall determine upon application that, despite adjudication of liability, but in view of all the circumstances of the case, such Director or Officer is fairly and reasonably entitled to indemnification for such Expenses that such court deems proper.

(3) Survival of Rights. The rights of indemnification provided by this Section 2 shall continue as to a Director or Officer after he or she has ceased to be a Director or Officer and shall inure to the benefit of his or her heirs, executors, administrators and personal representatives.

(4) Actions by Directors or Officers. Notwithstanding the foregoing, the Corporation shall indemnify any Director or Officer seeking indemnification in connection with a Proceeding initiated by such Director or Officer only if such Proceeding (including any parts of such Proceeding not initiated by such Director or Officer) was authorized in advance by the Board of Directors of the Corporation, unless such Proceeding was brought to enforce such Officer's or Director's rights to indemnification or, in the case of Directors, advancement of Expenses under these By-laws in accordance with the provisions set forth herein.

SECTION 3. Indemnification of Non-Officer Employees. Subject to the operation of Section 4 of this Article V of these By-laws, each Non-Officer Employee may, in the discretion of the Board of Directors of the Corporation, be indemnified by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended, against any or all Expenses and Liabilities that are incurred by such Non-Officer Employee or on such Non-Officer Employee's behalf in connection with any threatened, pending or completed Proceeding, or any claim, issue or matter therein, which such Non-Officer Employee is, or is threatened to be made, a party to or participant in by reason of such Non-Officer Employee's Corporate Status, if such Non-Officer Employee acted in good faith and in a manner such Non-Officer Employee reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The rights of indemnification provided by this Section 3 shall exist as to a Non-Officer Employee after he or she has ceased to be a Non-Officer Employee and shall inure to the benefit of his or her heirs, personal representatives, executors and administrators. Notwithstanding the foregoing, the Corporation may indemnify any Non-Officer Employee seeking indemnification in connection with a Proceeding initiated by such Non-Officer Employee only if such Proceeding was authorized in advance by the Board of Directors of the Corporation.

SECTION 4. Determination. Unless ordered by a court, no indemnification shall be provided pursuant to this Article V to a Director, to an Officer or to a Non-Officer Employee unless a determination shall have been made that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal Proceeding, such person had no reasonable cause to believe his or her conduct was unlawful. Such determination shall be made by (a) a majority vote of the Disinterested Directors, even though less than a quorum of the Board of Directors, (b) a committee comprised of Disinterested Directors, such committee having been designated by a majority vote of the Disinterested Directors (even though less than a quorum), (c) if there are no such Disinterested Directors, or if a majority of Disinterested Directors so directs, by independent legal counsel in a written opinion, or (d) by the stockholders of the Corporation.

SECTION 5. Advancement of Expenses to Directors Prior to Final Disposition.

(a) The Corporation shall advance all Expenses incurred by or on behalf of any Director in connection with any Proceeding in which such Director is involved by reason of such Director's Corporate Status within thirty (30) days after the receipt by the Corporation of a written statement from such Director requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Director and shall be preceded or accompanied by an undertaking by or on behalf of such Director to repay any Expenses so advanced if it shall ultimately be determined that such Director is not entitled to be indemnified against such Expenses. Notwithstanding the foregoing, the Corporation shall advance all Expenses incurred by or on behalf of any Director seeking advancement of expenses hereunder in connection with a Proceeding initiated by such Director only if such Proceeding (including any parts of such Proceeding not initiated by such Director) was (i) authorized by the Board of Directors of the Corporation, or (ii) brought to enforce such Director's rights to indemnification or advancement of Expenses under these By-laws.

(b) If a claim for advancement of Expenses hereunder by a Director is not paid in full by the Corporation within thirty (30) days after receipt by the Corporation of documentation of Expenses and the required undertaking, such Director may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim and if successful in whole or in part, such Director shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such advancement of Expenses under this Article V shall not be a defense to an action brought by a Director for recovery of the unpaid amount of an advancement claim and shall not create a presumption that such advancement is not permissible. The burden of proving that a Director is not entitled to an advancement of expenses shall be on the Corporation.

(c) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Director has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 6. Advancement of Expenses to Officers and Non-Officer Employees Prior to Final Disposition.

(a) The Corporation may, at the discretion of the Board of Directors of the Corporation, advance any or all Expenses incurred by or on behalf of any Officer or any Non-Officer Employee in connection with any Proceeding in which such person is involved by reason of his or her Corporate Status as an Officer or Non-Officer Employee upon the receipt by the Corporation of a statement or statements from such Officer or Non-Officer Employee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Officer or Non-Officer Employee and shall be preceded or accompanied by an undertaking by or on behalf of such person to repay any Expenses so advanced if it shall ultimately be determined that such Officer or Non-Officer Employee is not entitled to be indemnified against such Expenses.

(b) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Officer or Non-Officer Employee has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 7. Contractual Nature of Rights.

(a) The provisions of this Article V shall be deemed to be a contract between the Corporation and each Director and Officer entitled to the benefits hereof at any time while this Article V is in effect, in consideration of such person's past or current and any future performance of services for the Corporation. Neither amendment, repeal or modification of any provision of this Article V nor the adoption of any provision of the Certificate of Incorporation

inconsistent with this Article V shall eliminate or reduce any right conferred by this Article V in respect of any act or omission occurring, or any cause of action or claim that accrues or arises or any state of facts existing, at the time of or before such amendment, repeal, modification or adoption of an inconsistent provision (even in the case of a proceeding based on such a state of facts that is commenced after such time), and all rights to indemnification and advancement of Expenses granted herein or arising out of any act or omission shall vest at the time of the act or omission in question, regardless of when or if any proceeding with respect to such act or omission is commenced. The rights to indemnification and to advancement of expenses provided by, or granted pursuant to, this Article V shall continue notwithstanding that the person has ceased to be a director or officer of the Corporation and shall inure to the benefit of the estate, heirs, executors, administrators, legatees and distributees of such person.

(b) If a claim for indemnification hereunder by a Director or Officer is not paid in full by the Corporation within sixty (60) days after receipt by the Corporation of a written claim for indemnification, such Director or Officer may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim, and if successful in whole or in part, such Director or Officer shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such indemnification under this Article V shall not be a defense to an action brought by a Director or Officer for recovery of the unpaid amount of an indemnification claim and shall not create a presumption that such indemnification is not permissible. The burden of proving that a Director or Officer is not entitled to indemnification shall be on the Corporation.

(c) In any suit brought by a Director or Officer to enforce a right to indemnification hereunder, it shall be a defense that such Director or Officer has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 8. Non-Exclusivity of Rights. The rights to indemnification and to advancement of Expenses set forth in this Article V shall not be exclusive of any other right which any Director, Officer, or Non-Officer Employee may have or hereafter acquire under any statute, provision of the Certificate or these By-laws, agreement, vote of stockholders or Disinterested Directors or otherwise.

SECTION 9. Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any Director, Officer or Non-Officer Employee against any liability of any character asserted against or incurred by the Corporation or any such Director, Officer or Non-Officer Employee, or arising out of any such person's Corporate Status, whether or not the Corporation would have the power to indemnify such person against such liability under the DGCL or the provisions of this Article V.

SECTION 10. Other Indemnification. The Corporation's obligation, if any, to indemnify or provide advancement of Expenses to any person under this Article V as a result of such person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount such person may collect as indemnification or

advancement of Expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or enterprise (the "Primary Indemnitor"). Any indemnification or advancement of Expenses under this Article V owed by the Corporation as a result of a person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall only be in excess of, and shall be secondary to, the indemnification or advancement of Expenses available from the applicable Primary Indemnitor(s) and any applicable insurance policies.

ARTICLE VI

Miscellaneous Provisions

SECTION 1. Fiscal Year. The fiscal year of the Corporation shall be determined by the Board of Directors.

SECTION 2. Seal. The Board of Directors shall have power to adopt and alter the seal of the Corporation.

SECTION 3. Execution of Instruments. All deeds, leases, transfers, contracts, bonds, notes and other obligations to be entered into by the Corporation in the ordinary course of its business without director action may be executed on behalf of the Corporation by the Chairman of the Board, if one is elected, the President or the Treasurer or any other officer, employee or agent of the Corporation as the Board of Directors or the executive committee of the Board may authorize.

SECTION 4. Voting of Securities. Unless the Board of Directors otherwise provides, the Chairman of the Board, if one is elected, the President or the Treasurer may waive notice of and act on behalf of the Corporation, or appoint another person or persons to act as proxy or attorney in fact for the Corporation with or without discretionary power and/or power of substitution, at any meeting of stockholders or shareholders of any other corporation or organization, any of whose securities are held by the Corporation.

SECTION 5. Resident Agent. The Board of Directors may appoint a resident agent upon whom legal process may be served in any action or proceeding against the Corporation.

SECTION 6. Corporate Records. The original or attested copies of the Certificate, By-laws and records of all meetings of the incorporators, stockholders and the Board of Directors and the stock transfer books, which shall contain the names of all stockholders, their record addresses and the amount of stock held by each, may be kept outside the State of Delaware and shall be kept at the principal office of the Corporation, at an office of its counsel, at an office of its transfer agent or at such other place or places as may be designated from time to time by the Board of Directors.

SECTION 7. Certificate. All references in these By-laws to the Certificate shall be deemed to refer to the Amended and Restated Certificate of Incorporation of the Corporation, as amended and/or restated and in effect from time to time.

SECTION 8. Exclusive Jurisdiction of Delaware Courts and the United States Federal District Courts for Certain Claims. Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of or based on a fiduciary duty owed by any current or former director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation or any current or former director, officer or other employee or stockholder of the Corporation arising pursuant to any provision of the Delaware General Corporation Law or the Certificate or By-laws, or (iv) any action asserting a claim against the Corporation or any current or former director or officer or other employee of the Corporation governed by the internal affairs doctrine. Unless the Corporation consents in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Section 8.

SECTION 9. Amendment of By-laws.

(a) Amendment by Directors. Except as provided otherwise by law, these By-laws may be amended or repealed by the Board of Directors by the affirmative vote of a majority of the directors then in office.

(b) Amendment by Stockholders. These By-laws may be amended or repealed at any Annual Meeting, or special meeting of stockholders called for such purpose in accordance with these By-Laws, by the affirmative vote of not less than two thirds (2/3) of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class; provided, however, that if the Board of Directors recommends that stockholders approve such amendment or repeal at such meeting of stockholders, such amendment or repeal shall only require the affirmative vote of the majority of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class. Notwithstanding the foregoing, stockholder approval shall not be required unless mandated by the Certificate, these By-laws, or other applicable law.

SECTION 10. Notices. If mailed, notice to stockholders shall be deemed given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. Without limiting the manner by which notice otherwise may be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the DGCL.

SECTION 11. Waivers. A written waiver of any notice, signed by a stockholder or director, or waiver by electronic transmission by such person, whether given before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such person. Neither the business to be transacted at, nor the purpose of, any meeting need be specified in such a waiver.

Updated effective as of December 9, 2022



Magenta Therapeutics Presents Positive MGTA-117 Clinical Data at the American Society of Hematology (ASH) Annual Meeting and Provides Program Updates

– MGTA-117 preliminary clinical results from 15 patients across three dose-escalation cohorts of the ongoing Phase 1/2 clinical trial shows single-agent activity with no dose-limiting toxicities; transition to patients with transplant-eligible AML/MDS expected in H1 2023 pending regulatory alignment –

– CD45 antibody-drug conjugate (CD45-ADC) IND-enabling studies are advancing –

– MGTA-145 clinical trial for stem cell mobilization in sickle cell disease patients is progressing with data now expected to be shared H1 2023 –

– Conference call and webcast scheduled for 8:30am ET / 7:30am CT on December 13, 2022 –

Cambridge, MA – December 12, 2022 – Magenta Therapeutics (Nasdaq: MGTA), a clinical-stage biotechnology company developing novel medicines designed to bring the curative power of stem cell transplant to more patients, highlights updated clinical data from the ongoing MGTA-117 Phase 1/2 dose-escalation clinical trial made in an oral presentation today at the American Society of Hematology 2022 Annual (ASH) Meeting in New Orleans and provides program updates across the portfolio.

“We have shown that a single dose of MGTA-117 binds target cells, depletes target cells, clears the body quickly as designed, and does so with a favorable tolerability profile in our ongoing Phase 1/2 clinical trial. We believe that these positive clinical data establishes proof-of-mechanism, and that we have reached an active dose. Target cell depletion is a critical measurement of success for MGTA-117, and we are encouraged by the levels of depletion we have observed in both the blood and the bone marrow of relapsed/refractory acute myeloid leukemia (AML) and myelodysplastic syndrome (MDS) patients. We are excited about our planned next steps to take MGTA-117 into transplant-eligible AML and MDS patients as well as into patients who are receiving gene therapy. We are thankful to all of the patients and families who have participated in our trial to date as well as our investigators and the clinical site staff, all of whom have contributed greatly to the advancement of MGTA-117 for patients,” said Jason Gardner, President and Chief Executive Officer of Magenta Therapeutics. “Together with the progress we are making on CD45-ADC and MGTA-145, we are pleased with the momentum across our portfolio and the multiple anticipated inflection points for Magenta in the coming year.”

MGTA-117 Clinical Data and Continued Development

MGTA-117 is Magenta's most advanced targeted conditioning product candidate designed to deplete CD117-expressing target cells in the blood and/or bone marrow prior to a patient undergoing stem cell transplant or receiving an ex vivo gene therapy product. MGTA-117 is an anti-CD117 antibody conjugated to an amanitin payload. CD117, also known as c-Kit receptor, is highly expressed on hematopoietic stem cells, progenitor cells and cancer blast cells.

Current Phase 1/2 Patient Population and Potential Significance for Clinical Development

The ongoing Phase 1/2 clinical trial is in relapsed/refractory (R/R) AML and MDS. These patients are deemed ineligible for transplant due to active disease characterized by high numbers of cancer blast cells present in the bone marrow and in the bloodstream. Over 80% of patients with AML and MDS express the CD117 receptor on the surface of their cancer cells. In these patients, CD117+ target cells are a combination of cancer blast cells in the blood and bone marrow and non-malignant stem and progenitor cells in the bone marrow. MGTA-117 is designed to target all of these cells, and clinical evidence of depletion in this patient population provides valuable support that MGTA-117 will robustly deplete target cells in the proposed next phase of development in (i) transplant-eligible AML and MDS patients who have significantly lower numbers of cancer blast cells and (ii) gene therapy patients who have no cancer blast cells. Therefore, Magenta expects MGTA-117 to bind and deplete target cells in the bone marrow in these patient populations, and potentially achieve greater levels of depletion, at the same dose levels studied in R/R AML and MDS patients.

MGTA-117 Proof-of-Mechanism and Potential Active Dose

- *Participants Dosed & Available Data.* As of December 1, 2022, a total of 15 participants have been dosed with MGTA-117 in Cohorts 1, 2 and 3. All dosed participants contributed data in whole or in part to the preliminary data set depending on an individual's availability for collecting assessments. Eleven of the 15 dosed participants completed the dose-limiting toxicity safety observation period of 21 days. None of the four participant discontinuations were deemed to be related to MGTA-117.
- *Target Cell Binding.* MGTA-117 bound to CD117-expressing target cells within 15 minutes after dosing in all participants as measured by a receptor occupancy (RO) assay. RO increased with higher dose levels of MGTA-117. The percentage of occupied CD117 receptors was greater, and the receptor occupancy was more durable at the higher dose levels of Cohorts 2 and 3 as compared to Cohort 1 as expected.

- Target Cell Depletion.
 - *Depletion in Blood and Bone Marrow.* MGTA-117 showed greater depletion of target cancer blast cells in the blood of participants in Cohorts 2 and 3 compared to Cohort 1. In addition, three out of the four participants in Cohort 3 for whom paired bone marrow samples were collected at baseline and post-dosing had depletion of cancer blast cells in both blood and bone marrow. This matched depletion response in the blood and bone marrow provides evidence of an active dose and dose-dependent depletion of CD117-expressing cells.
 - *Two Transplant-Ineligible Participants Became Transplant-Eligible.* Participants entering the clinical trial were considered ineligible for stem cell transplant and had active and persistent AML/MDS after receiving one or more anti-leukemic therapies. One relapsed/refractory MDS participant in Cohort 3 had a reduction of bone marrow cancer blast cells to a level that enabled the participant to become eligible for transplant. This is the trial's second participant who became eligible for transplant after a single dose of MGTA-117. The first participant, from Cohort 1, had relapsed/refractory AML and was previously disclosed.
- Clearance. MGTA-117 was shown to be rapidly cleared from the body as expected. No MGTA-117 was detectable in the blood 48 hours after dosing in Cohorts 1 and 2, and over 95% of MGTA-117 was cleared in the blood 48 hours after dosing at the higher dose level of Cohort 3. Rapid clearance of MGTA-117 was engineered into the molecule to ensure avoidance of depleting newly transplanted donor cells in allogeneic transplant or, in the case of gene therapy, of autologous gene-modified cells. In addition, the MGTA-117 ADC was shown to be stable in blood over time in all participants, and no free payload was detectable in the blood of any participants at any time point.
- Tolerability. MGTA-117 was well-tolerated in all participants. No serious adverse events were deemed to be related to MGTA-117, and no dose-limiting toxicities were observed. Treatment-related adverse events deemed to be related to MGTA-117 were low-grade liver enzyme elevations, low-grade fever, and grade 3 and grade 4 leukopenia in two participants who had baseline grade 2 and grade 3 leukopenia, respectively. All instances of observed liver enzyme elevations were low-grade, transient and resolved without intervention, as expected.
- Continued Trial Progress and Data Expectations. The Phase 1/2 clinical trial is currently enrolling in Cohort 4 (0.13 mg/kg) and Magenta anticipates presenting aggregate clinical data from the clinical trial, including Cohort 4, at a scientific conference in Q1 2023.

MGTA-117 Regulatory Engagement and Clinical Development Next Steps in Transplant-Eligible AML/MDS and Autologous Gene Therapy

As previously disclosed, Magenta has initiated formal engagements with regulatory agencies to transition MGTA-117 into a transplant-eligible AML and MDS patient population. Magenta also plans to engage regulators in H1 2023 for the purposes of initiating a MGTA-117 clinical trial in autologous *ex vivo* gene therapy.

- *Transplant-Eligible AML and MDS.* Magenta anticipates that MGTA-117's pharmacokinetics (PK), pharmacodynamics (PD) and tolerability in Cohorts 1-3 will support alignment with regulatory authorities to study MGTA-117 in AML and MDS transplant-eligible patients. Importantly, the proposed study design in the transplant setting will allow for the measurement of depletion of CD117-expressing cells in the bone marrow after a single dose of MGTA-117 prior to reduced-intensity conditioning (RIC) and the ensuing allogeneic transplant. By depleting residual cancer blast cells prior to a standard RIC regimen, MGTA-117 has the potential to boost disease control prior to transplant and improve disease outcomes post-transplant. These potential positive outcomes could address the current significant unmet need associated with RIC-conditioning where AML and MDS patients relapse at a rate of 40%-50% within six months post-transplant¹. Pending regulatory alignment, Magenta plans to share additional details of the proposed transplant-eligible MGTA-117 study design in Q1 2023.
- *Gene Therapy.* Magenta expects to use the clinical data package from the ongoing Phase 1/2 trial, together with supporting insights from PK/PD modeling, to engage with regulators on a potential MGTA-117 clinical trial in autologous *ex vivo* gene therapy. In a gene therapy clinical trial, Magenta anticipates dosing patients with MGTA-117 to deplete stem and progenitor cells before the patient receives an infusion of gene-modified stem cells, with a goal of replacing the current standard-of-care conditioning that relies on high doses of chemotherapeutic agents such as busulfan, which is known to be carcinogenic. Magenta anticipates sharing more details in 2023 as development plans progress in collaboration with gene therapy partners. Magenta has existing clinical collaborations with gene therapy companies and anticipates entering into additional collaborations as MGTA-117 development advances.

CD45-ADC IND-Enabling Plans

Magenta's CD45-ADC is a second targeted conditioning ADC, designed to selectively target and deplete both stem cells and immune cells, and is intended to replace the use of chemotherapy-based conditioning prior to stem cell transplant in patients with blood cancers and autoimmune diseases.

- As previously disclosed, Good Manufacturing Practice (GMP) manufacturing and other investigative new drug application (IND)-enabling activities are ongoing for the CD45-ADC program. A Good Laboratory Practice (GLP) toxicology study is expected to be completed in H2 2023.
- Magenta anticipates regulatory interactions prior to filing an IND and anticipates providing further details on the CD45-ADC program in 2023, including molecule design, key preclinical data, and timelines to IND.

MGTA-145 Phase 2 Progress

Magenta is developing MGTA-145, in combination with plerixafor, to improve the process by which stem cells are released out of the bone marrow and into the bloodstream, known as stem cell mobilization. The mobilized cells are then collected and available for transplant. This is the first step for patients and is required for the majority of transplants and stem cell gene therapies.

- Magenta, in partnership with bluebird bio, is enrolling patients in a Phase 2 clinical trial evaluating the ability of MGTA-145 in combination with plerixafor to mobilize stem cells for collection in patients with sickle cell disease.
- Due to enrollment delays at the clinical sites that are unrelated to MGTA-145, Magenta anticipates disclosing clinical data in H1 2023.

Conference Call Information:

Magenta will host a conference call and webcast at 8:30 a.m. Eastern Time / 7:30 a.m. Central Time tomorrow, Tuesday, December 13, 2022 to review the MGTA-117 data presented at the 2022 ASH Annual Meeting.

To access the conference call, please register online at <https://register.vevent.com/register/BI872661cff05d4191a7bb100830aae147>. Upon registering, each participant will be provided with call details and a conference ID. The live webcast of the call and slide deck may be accessed at <https://edge.media-server.com/mmc/p/hk2eojv2>, or by visiting the Investors & Media section of the company's website at <https://investor.magentatx.com>. A replay of the webcast will be available shortly after the conclusion of the call and will be archived on the Events & Presentations page.

¹ Scott, Journal of Clinical Oncology 2017. <https://pubmed.ncbi.nlm.nih.gov/28380315/>

About Magenta Therapeutics

Magenta Therapeutics is a clinical-stage biotechnology company developing medicines designed to bring the curative power of stem cell transplant 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 transplant and potentially improve eligibility for future gene therapies.

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

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; proposed study designs; potential collaborations with other companies; the potential benefits and expected performance of Magenta's product candidates and programs; the development of product candidates and advancement of preclinical and clinical programs, including, without limitation, patient enrollment; expectations, plans and timing for preclinical activities, clinical trials and related results involving Magenta's product candidates; expectations, plans and timing for the generation, receipt and disclosure of preclinical and clinical trial data, toxicology results, and other results involving Magenta's product candidates; timing for the disclosure of developmental timelines, developmental plans and program updates regarding Magenta's product candidates; the completion of dose-limiting toxicity observation periods; regulatory interactions and alignment with regulators; the use of clinical data and supporting insights from PK/PD modeling in regulatory engagement and advancement into transplant eligible AML and MDS patients and gene therapy patients; that MGTA-117's pharmacokinetics (PK), pharmacodynamics (PD) and tolerability in Cohorts 1-3 will support alignment with regulatory authorities to study MGTA-117 in AML and MDS transplant-eligible patients; that clinical evidence of depletion in the AML and MDS patient population provides valuable support that MGTA-117 will robustly deplete target cells in the proposed next phase of development in (i) transplant-eligible AML and MDS patients who have significantly lower numbers of cancer blast cells and (ii) gene therapy patients who have no cancer blast cells, and Magenta's expectation that MGTA-117 will bind and deplete target cells in the bone marrow in these patient populations at the same or lower dose levels studied in R/R AML and MDS patients; the planned transition of the MGTA-117 Phase 1/2 clinical trial into transplant-eligible AML and MDS patients, as well as into patients who are receiving gene therapy; and the predictive value of Magenta's MGTA-117 preclinical modeling.

Words such as "anticipate," "believe," "continue," "could," "designed," "endeavor," "estimate," "expect," "intend," "may," "might," "plan," "potential," "predict," "project," "seek," "should," "target," "preliminary," "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; vulnerability and/or fragility of, and the presence of underlying disorders in, the patient population for the clinical trials of Magenta's product candidates, including the MGTA-117 Phase 1/2 clinical trial in patients with relapsed/refractory AML and MDS; that preliminary data from Magenta's clinical trials may change materially following a more comprehensive review of the data; the delay of any current or planned preclinical or clinical trials, or the delay in 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 Quarterly Report on Form 10-Q for the quarter ended September 30, 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:

Jill Bertotti, Real Chemistry (advisor to Magenta)
714-225-6726
jbertotti@realchemistry.com



MGTA-117 Clinical Data Update

ASH Annual Meeting

December 13, 2022

(NASDAQ: MGTA)



Agenda & Introductions

Introduction

Review of MGTA-117 Phase 1/2 Clinical Results – Cohorts 1-3

Next Steps

Q&A Session



Jason Gardner, D.Phil.
CEO, President
and Co-founder



Lisa Olson, Ph.D.
Chief Scientific Officer



**Shawn Rose,
M.D., Ph.D.**
Senior Vice President,
Clinical Development



**Steve Mahoney,
J.D., M.B.A.**
Chief Financial and
Operating Officer

Forward-Looking Statements

This presentation 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 goals, potential benefits and expected performance of Magenta's product candidates and programs; the potential of Magenta's product candidates and programs to drive expansion of patient eligibility across stem cell transplant and gene therapies; the potential of stem cell transplant as a platform for advancing cell and gene therapies; the eligibility of future patient populations with improved conditioning; MGTA-117's potential to improve upon current conditioning approaches, including the potential to reduce or eliminate the need for chemo- or radiation-based conditioning; the development of product candidates and advancement of preclinical and clinical programs, including, without limitation, patient enrollment; expectations, plans and timing for preclinical activities and clinical trials involving Magenta's product candidates; expectations, plans and timing for the generation, receipt and disclosure of preclinical and clinical data and other results involving Magenta's product candidates; timelines and expectations for patient dosing, dosing regimens and administration; regulatory engagement, interactions and alignment with regulators; the expected transition of MGTA-117 into transplant-eligible patients and gene therapy patients; that MGTA-117's evidence of depletion in the Relapsed / Refractory AML and MDS patient population provides an important readthrough for the next phase of development; that MGTA-117 is expected to more efficiently target CD117+ blast and/or stem cells in the bone marrow of transplant-eligible AML and MDS patients and gene therapy patients due to lower number or absence of blasts in those patient populations; potential study designs and partners for use of MGTA-117 in transplant eligible patients and gene therapy; and plans to develop in gene therapy and collaborations with Magenta's partners.

Words such as "anticipate," "believe," "continue," "could," "designed," "endeavor," "estimate," "expect," "goal," "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 presentation 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; vulnerability and/or fragility of, and the presence of underlying disorders in, the patient population for the clinical trials of Magenta's product candidates, including the MGTA-117 Phase 1/2 clinical trial in patients with relapsed/refractory AML and MDS; that preliminary data from Magenta's clinical trials may change materially following a more comprehensive review of the data; the delay of any current or planned preclinical or clinical trials, or the delay in 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 Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 and its other filings made with the Securities and Exchange Commission from time to time. Any forward-looking statements contained in this presentation represent Magenta's views only as of the date of this presentation 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.

Transplant could be a path to a cure

90,000

stem cell transplants/year globally¹



Blood Cancers (AML, MDS)

~60% of eligible patients receive transplant³



Gene Therapy (Sickle Cell Disease)

<1% of eligible patients receive transplant³



Autoimmune (Multiple Sclerosis)

Barriers to transplant

Significant Limitations of Current Conditioning Options:

Many patients need high intensity chemotherapy conditioning to prepare for transplant



~20%

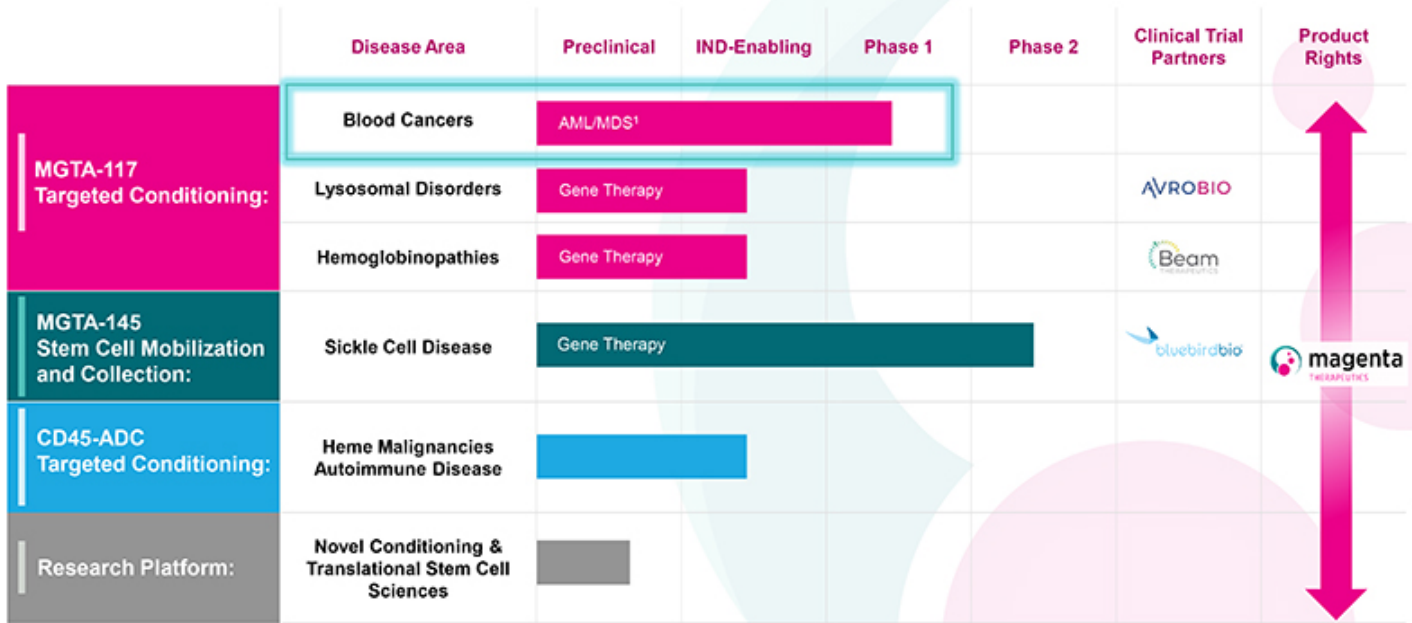
Mortality associated with chemotherapy conditioning regimens²

Opening the door to a cure

Magenta addresses key factors keeping patients from accessing HSCT and better outcomes

⁴ HSCT: Hematopoietic Stem Cell Transplant Source: ¹ CIBMTR, EBMT, and APBMT Transplant Registry Data (2018), ² Scott, BL. *Biol Blood Marrow Transplant*. 2020, 26 (3): S11; ³ Magenta Market Research, Data on File (2020)

Differentiated Pipeline with Potentially First-in-Class ADC Targeted Conditioning



5 ¹ AML/MDS: Acute Myeloid Leukemia or Myelodysplastic Syndromes

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TARGETED CONDITIONING

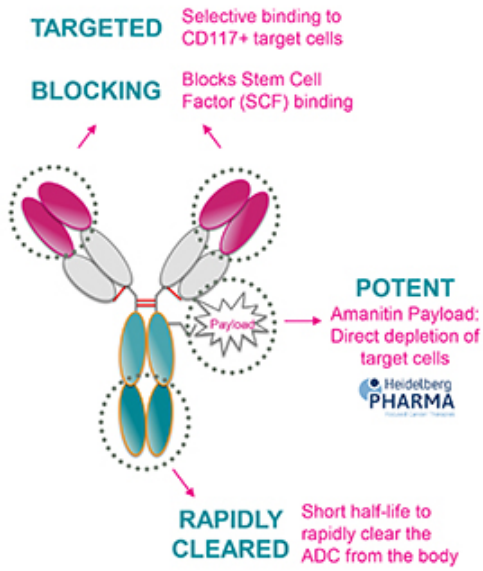
MGTA-117



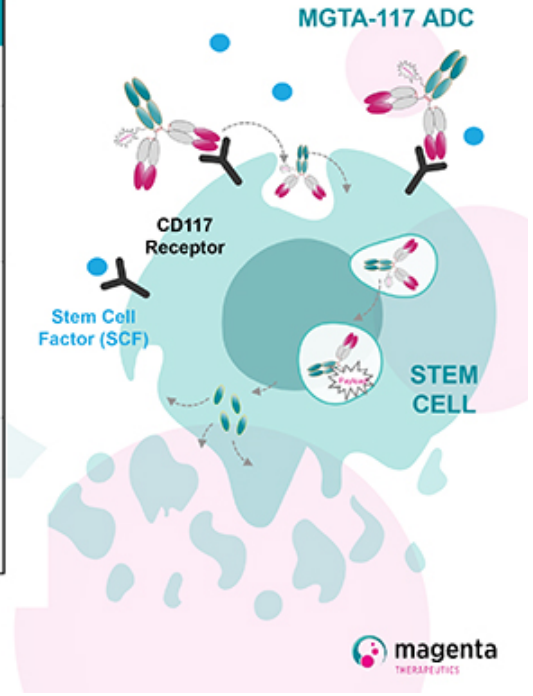
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MGTA-117: Antibody-Drug Conjugate Designed to Selectively Deplete Target Cells



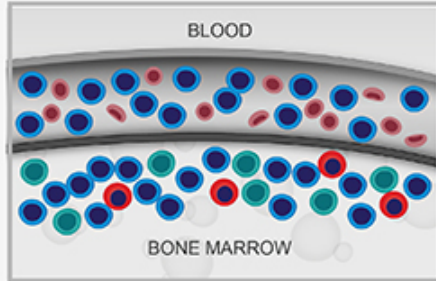
MGTA-117 ADC	
Target	CD117
Target Cells	<ul style="list-style-type: none"> • Stem cells • Cancer blast cells
Dual Mechanism Depletion	<ul style="list-style-type: none"> • ADC-mediated cytotoxicity • Blocking of stem cell factor¹
Disease Applications	<ul style="list-style-type: none"> • Blood cancers • Gene therapy



Multiple CD117+ Target Cells in Bone Marrow and Blood Across Diseases

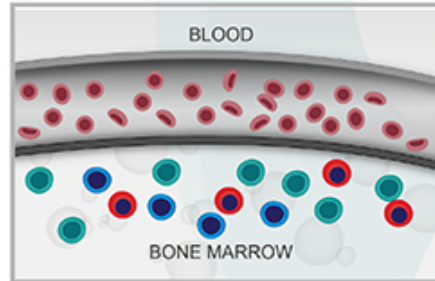
Relapsed / Refractory AML & MDS Patients

- High numbers of cancer blast cells in blood and bone marrow



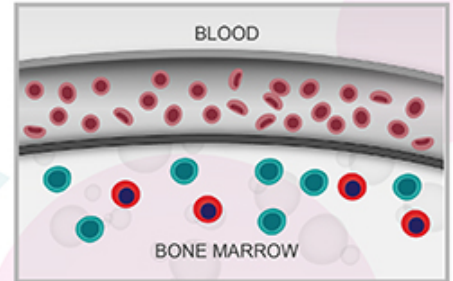
Transplant-Eligible AML & MDS Patients

- Limited cancer blast cells in bone marrow



Gene Therapy Patients

- No cancer blast cells in blood or bone marrow

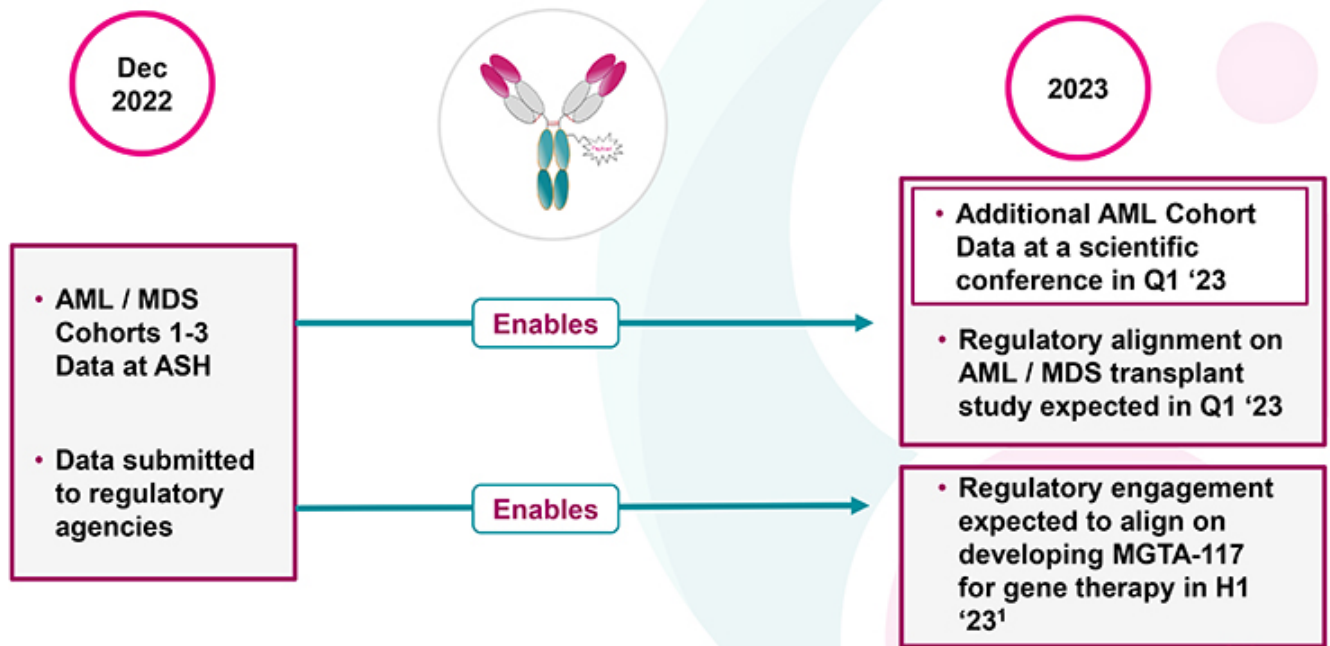


● CD117+ Cancer blast cells ● CD117+ Stem cells ● CD117+ Erythroid progenitor cells ● Red blood cells

8 Sources: Kent et al. Clin Cancer Res (2008) 14 (7): 1926-1930, Wells et al. Am J Clin Pathol (1996) 106(2):192-5, Treatment of relapsed or refractory acute myeloid leukemia – UpToDate

Confidential

Current Data Set & Dosing Regimen Expected to Support Move to Transplant and Gene Therapy Studies





American Society of Hematology

Helping hematologists conquer blood diseases worldwide



MGTA-117, an Anti-CD117 Antibody-Drug Conjugated With Amanitin, in Participants With Relapsed/Refractory Adult Acute Myeloid Leukemia (AML) and Myelodysplasia With Excess Blasts (MDS-EB): Safety, Pharmacokinetics and Pharmacodynamics Initial Findings From a Phase 1/2 Study

Peter Westervelt, MD, PhD¹; Partow Kebriaei, MD²; Mark Juckett, MD³; Andrew S. Artz, MD⁴; Onyee Chan, MD⁵; Philip L. McCarthy, MD⁶; Sherif Farag, MD, PhD⁷; Anurag K. Singh, MD⁸; Eytan Stein, MD⁹; Ji Hyun Lee, MD, MPH¹⁰; Alison Occhiuti, MS¹⁰; Jeanie Tang, BS¹⁰; David Santos, BS¹⁰; Kirk Bertelsen, PhD¹⁰; Balaji Mahender, BPharm, MS¹⁰; Nicole Henry, BSN, RN¹⁰; Shawn Rose, MD, PhD¹⁰

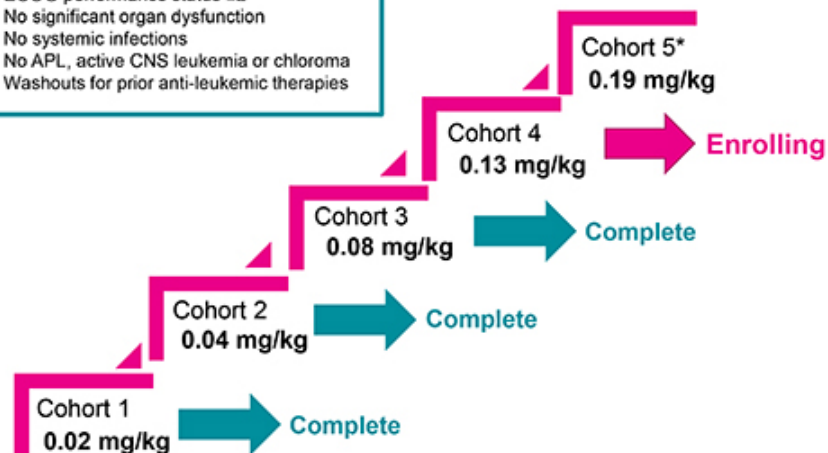
¹Washington University, St. Louis, MO, USA; ²The University of Texas MD Anderson Cancer Center, Houston, TX, USA; ³University of Minnesota, Minneapolis, MN, USA; ⁴City of Hope, Duarte, CA, USA; ⁵H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL, USA; ⁶Roswell Park Comprehensive Cancer Center, Buffalo, NY, USA; ⁷IU Simon Cancer Center, Indianapolis, IN, USA; ⁸University of Kansas Medical Center, Kansas City, KS; ⁹Memorial Sloan Kettering Cancer Center, New York, NY, USA; ¹⁰Magenta Therapeutics, Cambridge, MA, USA

MGTA-117: Phase 1/2 Clinical Trial Design

Phase 1/2 Study in CD117+ Relapsed / Refractory AML and MDS-EB

Key Inclusion / Exclusion Criteria

- CD117+ R/R AML or MDS-EB
- Age 18-75 with identified HSCT donor
- ECOG performance status ≤ 2
- No significant organ dysfunction
- No systemic infections
- No APL, active CNS leukemia or chloroma
- Washouts for prior anti-leukemic therapies



Study Design

- Multi-center, U.S. Study
- Open Label
- Single Ascending Dose(s)
- 3+3 Cohort Design
- Modified Fibonacci Sequence for Dosing

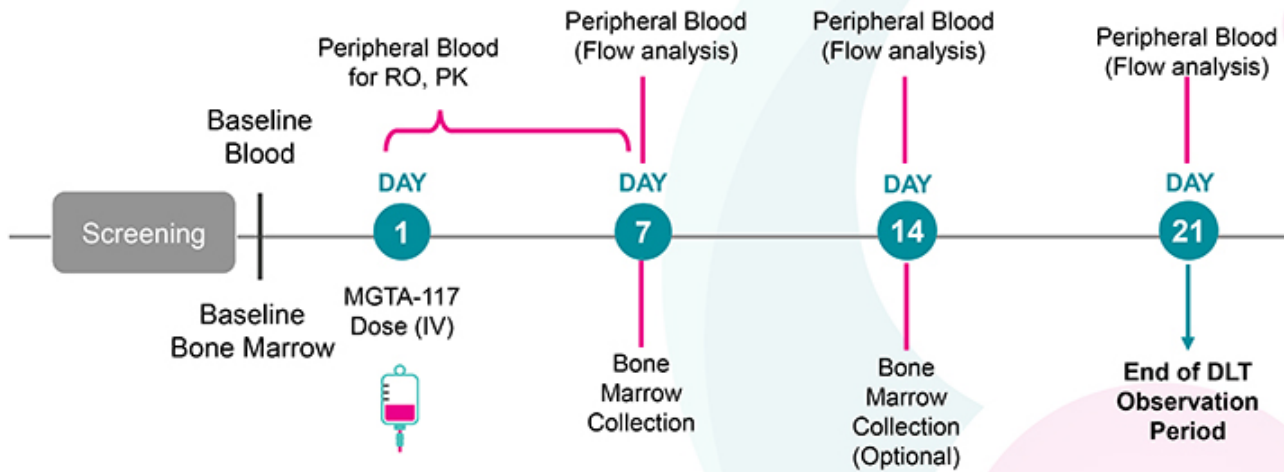
Key Objectives

- Target Engagement (RO)
- Robust Cell Depletion (PD)
- Rapid Clearance (PK)
- Tolerability/Safety

*Up to 8 cohorts, up to 42 participants may be enrolled. Doses: 0.02-0.40 mg/kg.

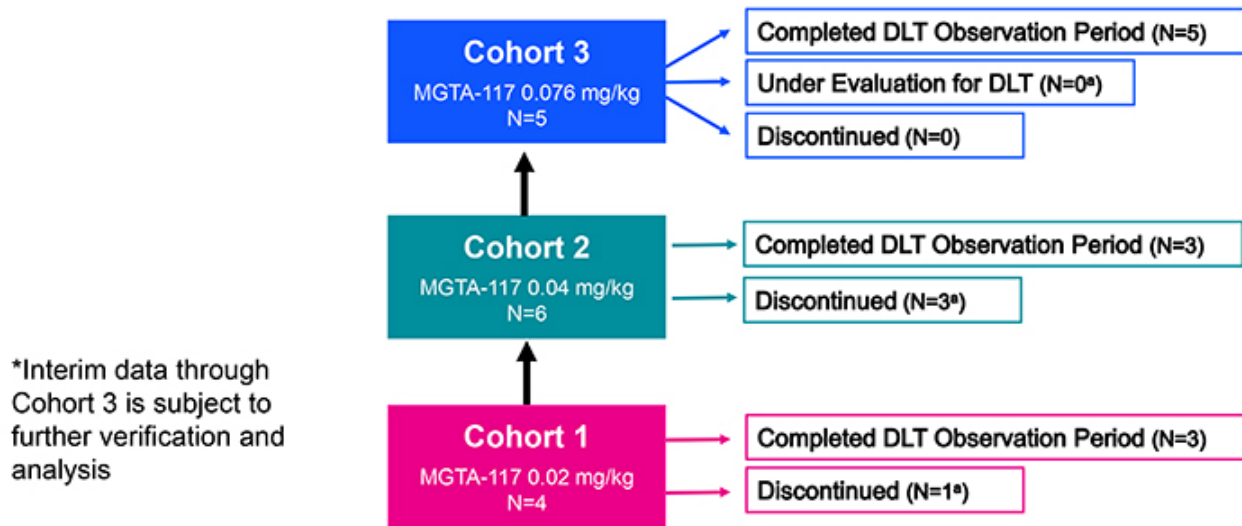
11 PD, pharmacodynamics; PK, pharmacokinetics; RO, receptor occupancy; R/R, relapsed refractory; AML, acute myeloid leukemia; MDS-EB, Myeloid dysplastic syndrome with excess blasts, HSCT: hematopoietic stem cell transplant, ECOG: Eastern Cooperative Oncology Group, APL, acute promyelocytic leukemia; CNS, central nervous system

MGTA-117 Phase 1/2 Schedule of Assessments



Note: Protocol amendment implemented to change bone marrow biopsy collection from 14 days (Cohort 1) to 7 days (Cohort 2 onwards) after dosing; samples not always collected depending on the health of the participant

Participant Disposition Through the DLT Observation Period



Participant discontinuations from the study were all considered unrelated to MGTA-117

13 *Data from discontinued participants contributed to study outcome assessments (safety, PK, RO, PD)
DLT, Dose Limited Toxicity

Baseline Participant Demographics and Disease Characteristics

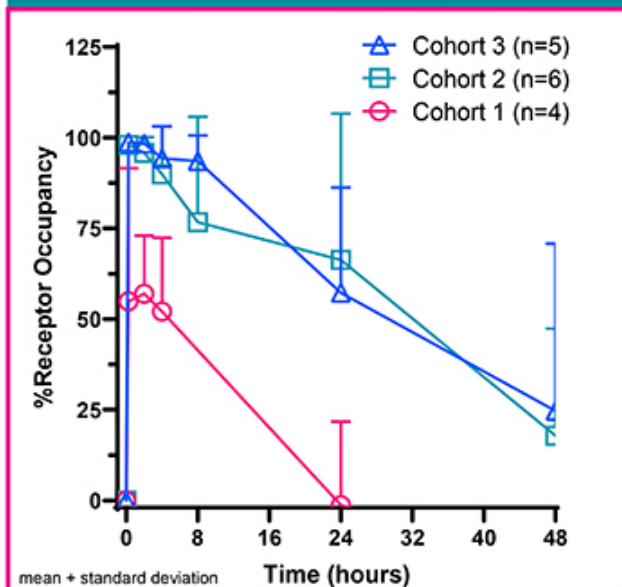
R/R AML study population has a poor prognosis with a high burden of disease and multiple previous lines of therapy

Characteristics	Total (N=15)
Age, Years, Median (range)	65 (26-74)
Sex, Male/Female	6 / 9
Diagnosis, n, AML/MDS	13 / 2
ELN Risk Classification for AML	
Adverse	5
Intermediate	5
Unknown	3
Months Since Diagnosis, Median (range)	9 (3-38)
Bone Marrow Blast % at Baseline, Median (range)	24 (5-60)
Prior Lines of Therapy, Median (range)	2.5 (1-8)

ELN: European LeukemiaNet

MGTA-117 Rapidly Bound to CD117⁺ Cancer Blast Cells in Blood

Receptor Occupancy (N=15)

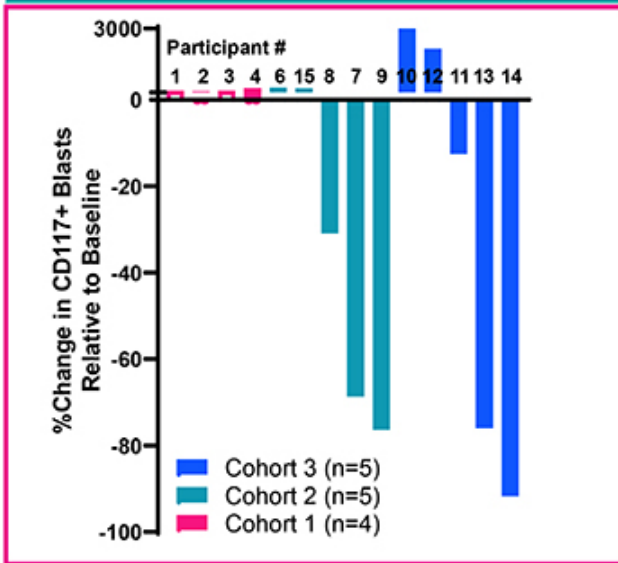


Key Results

- Binding of CD117⁺ cells observed in all participants at 15-minute initial measurement after dosing
- RO decline observed in all dosed participants indicating internalization of MGTA-117
- Higher receptor occupancy was observed in Cohorts 2 and 3 relative to Cohort 1
- Longer duration of receptor occupancy was observed in Cohorts 2 and 3 relative to Cohort 1

MGTA-117 Depleted CD117⁺ Cancer Blast Cells in Peripheral Blood

Depletion in Blood (N=14)

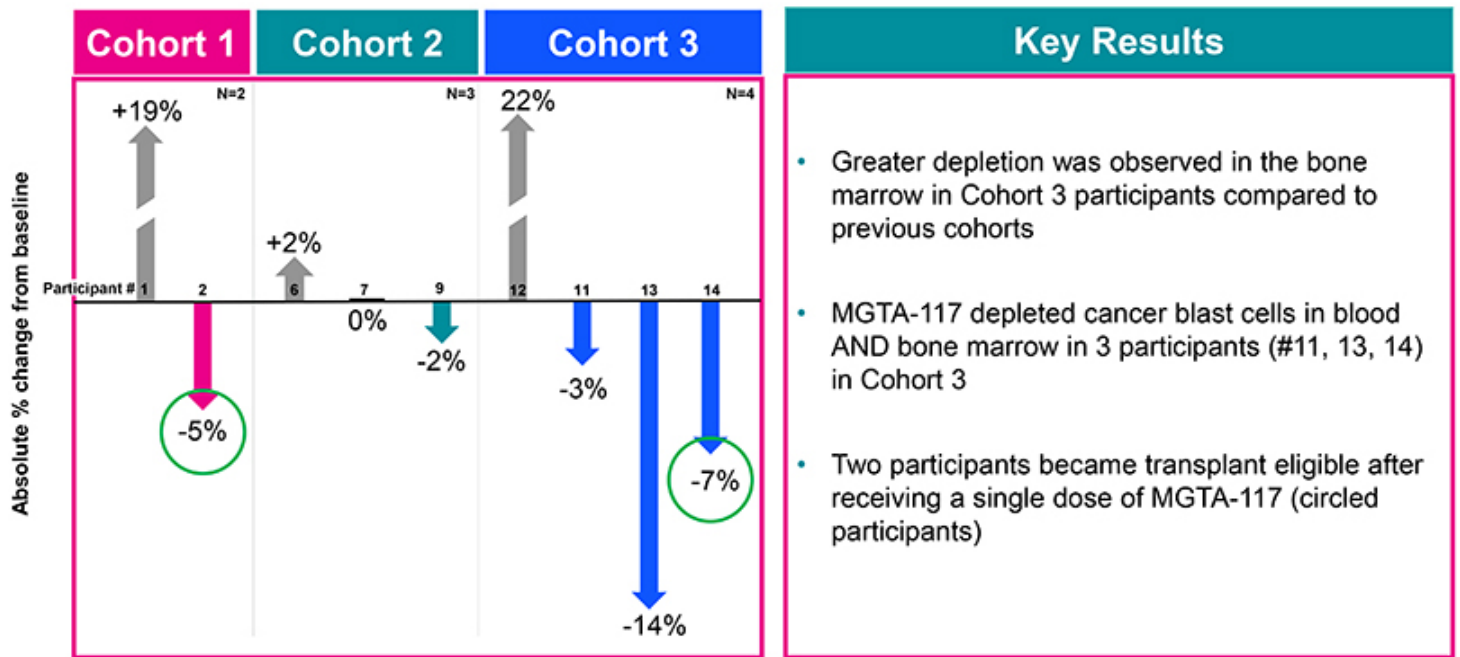


Analysis by flow cytometry; percent change is the maximum change at any time point up to Day 21 relative to baseline
Cancer blast cells defined as CD45⁺CD34^{bright}CD33⁺CD117⁺

Key Results

- Depletion of CD117⁺ cancer blast cells was observed in the blood in Cohorts 2 and 3
- Higher depletion in Cohorts 2 and 3 compared to Cohort 1 observed, consistent with higher and longer receptor occupancy in the blood

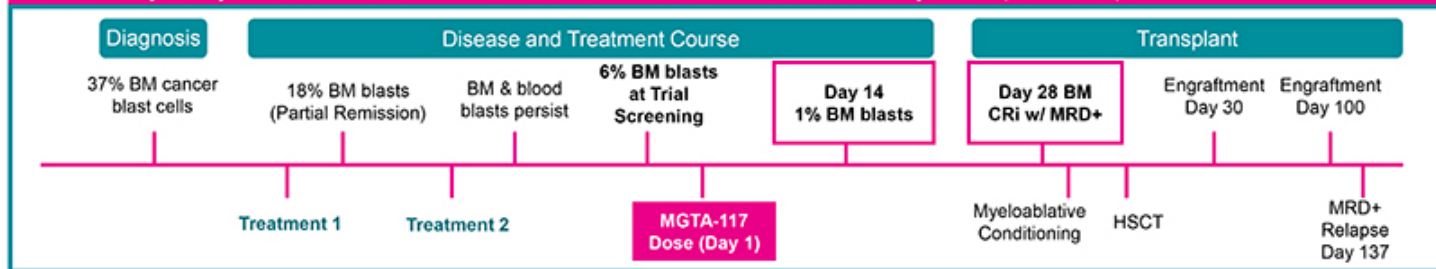
MGTA-117 Depleted Cancer Blast Cells in the Bone Marrow



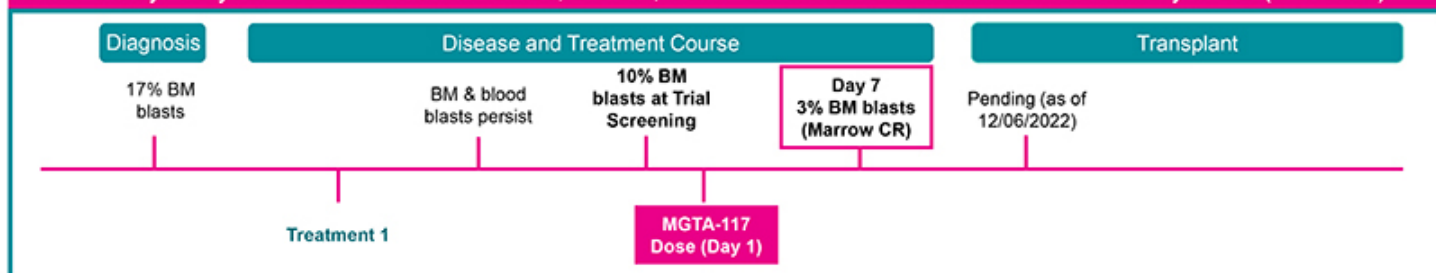
- Greater depletion was observed in the bone marrow in Cohort 3 participants compared to previous cohorts
- MGTA-117 depleted cancer blast cells in blood AND bone marrow in 3 participants (#11, 13, 14) in Cohort 3
- Two participants became transplant eligible after receiving a single dose of MGTA-117 (circled participants)

A Single Dose of MGTA-117 in Participants with Relapsed/Refractory AML/MDS Resulted in Two Participants Becoming Transplant Eligible

Case Study: 58-year-old male with FLT3 mutation and treatment refractory AML (Cohort 1)



Case Study: 73-year-old female with ASXL1, BCOR, U2AF1 mutations and treatment refractory MDS (Cohort 3)



AML: Acute Myeloid Leukemia; BM: Bone Marrow; CRi: Complete Remission with incomplete hematologic recovery; HSCT: Hematopoietic Stem Cell Transplantation; MAC: Myeloablative Conditioning; MDS: Myelodysplastic Syndrome

MGTA-117 Was Well-Tolerated in Cohorts 1-3

Category	Cohort 1 (N=4) n (%)	Cohort 2 (N=6) n (%)	Cohort 3 (N=5) n (%)
Participants with Treatment-Emergent Adverse Events (TEAEs)			
TEAEs classified as dose-limiting toxicities	0	0	0
Serious AEs (all unrelated)	1 (25)	4 (67)	2 (40)
Grade 3 or higher TEAEs	3 (75)	4 (67)	3 (60)
TEAEs resulting in death (all unrelated) AML disease progression, N=2; sepsis, N=1	1 (25)	2 (33)	0 (0)
TEAEs in >20% of Participants Regardless of Causality			
Nausea (27%), constipation (27%), hypokalaemia (27%), hypomagnesaemia (20%) disease progression (20%), liver enzyme elevation (20%), headache (20%) Leukopenia (20%)			
Participants with MGTA-117 Related TEAEs			
Grade 1 (liver enzyme elevation)	1 (25)	1 (17)	0
Grade 2 (fever)	0	1 (17) ¹	0
Grade 3 (leukopenia)	0	0	1 (20) ²
Grade 4 (leukopenia)	0	0	1 (20) ³
Grade 5	0	0	0
Total	1 (25)	2 (33)	2 (40)

¹ One participant (Cohort 2) had a Grade 2 liver enzyme elevation not reflected in table; pending site data entry

² Participant had severe neutropenia with Grade 2 leukopenia at baseline

³ Participant had severe neutropenia with Grade 3 leukopenia at baseline

¹⁹ TEAEs observations are from independent participants

TEAEs: Treatment- Emergent Adverse Events; AEs: Adverse Events.

Safety and Tolerability

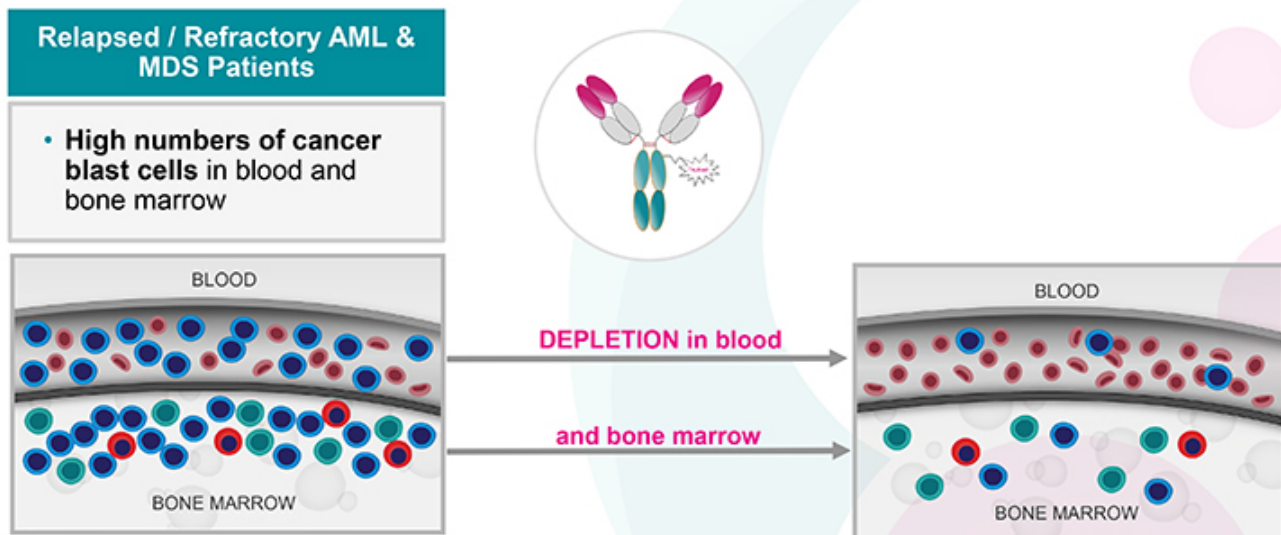
- Treatment-emergent AEs considered consistent with underlying disease
- No unexpected AEs, treatment-related serious AEs, treatment-related deaths, or dose-limiting toxicities (DLTs) were observed
- No treatment-related infusion reactions were observed
- No MGTA-117 related TEAEs led to discontinuation
- Liver enzyme elevations were expected, transient, low-grade, and resolved without any intervention

Summary of Phase 1/2 Trial Results – Cohorts 1-3

Goals	Clinical Observations
Engage	Target Engagement: Measurable MGTA-117 binding to CD117 ⁺ target cells in the blood of all participants
Deplete	Cell Depletion: MGTA-117 depletes target cells in the blood and bone marrow
Clear	Pharmacokinetics: MGTA-117 rapidly clears from the blood; no detectable payload indicates the ADC is stable in the blood
Well Tolerated	Tolerability: No unexpected or serious treatment-related adverse events were reported; no dose-limiting toxicities (DLTs)

Source: 15 participants dosed with MGTA-117, 11 participants completed the safety evaluation period; preliminary data, subject to further verification and analysis

MGTA-117 Depletion in the R/R Patient Population Provides an Important Readthrough for the Next Phase of Development



● CD117+ Cancer blast cells ● CD117+ Stem cells ● CD117+ Erythroid progenitor cells ● Red blood cells

Potential for Robust Bone Marrow Depletion in Transplant-Eligible AML/MDS and Gene Therapy Patients

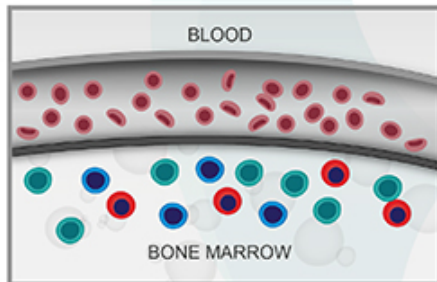
MGTA-117 expected to more efficiently target CD117+ blast and/or stem cells in bone marrow due to lower number or absence of blasts



MGTA-117 targets CD117+ cells for DEPLETION in bone marrow

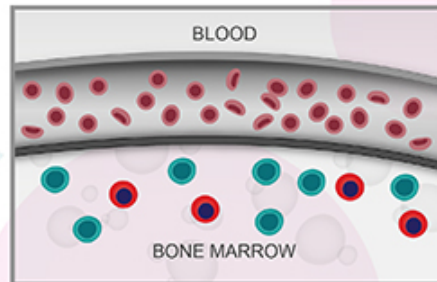
Transplant-Eligible AML & MDS Patients

- Limited cancer blast cells in bone marrow



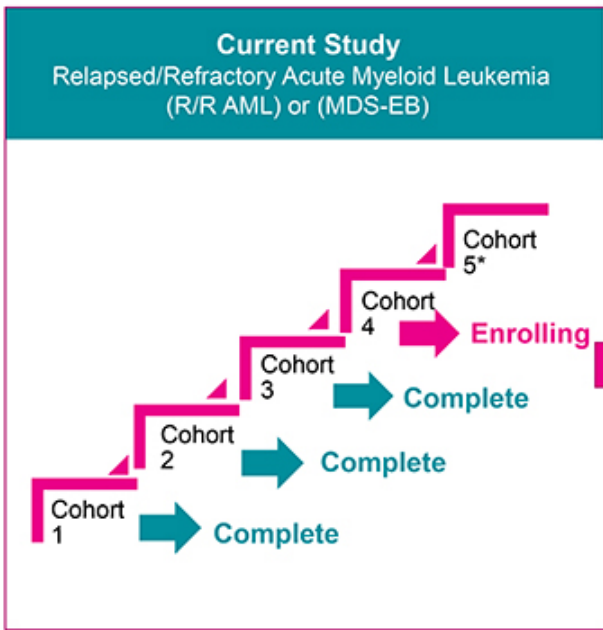
Gene Therapy Patients

- No cancer blast cells in blood or bone marrow
- Only stem cells and progenitor cells

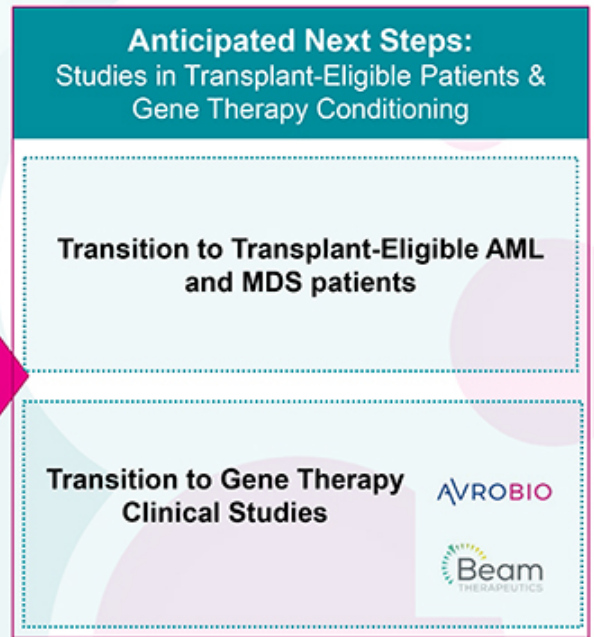


● CD117+ Cancer blast cells ● CD117+ Stem cells ● CD117+ Erythroid progenitor cells ● Red blood cells

Anticipated Further Development in Transplant-Eligible and Gene Therapy Patients



Expected Alignment with regulators on path to transplant



* Up to 8 cohorts, up to 42 patients may be enrolled
Doses: 0.02-0.40 mg/kg

Potential Impact of MGTA-117

Potential Outcomes


MGTA-117 administered as a single agent, single dose


AML & MDS

Reduce disease burden prior to **Reduced Intensity Conditioning (RIC)** by depletion of target cancer blast cells and stem cells

Gene Therapy

Deplete stem and progenitor cells in the bone marrow **without busulfan**


Improve relapse and outcomes post-transplant


Better outcomes vs. SOC conditioning with expanded patient eligibility

MGTA-117 NEXT STEPS



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MGTA-117 Summary of Cohorts 1-3 and Next Steps

Single Agent Depletion Activity

- MGTA-117 has shown target cell depletion in the blood and bone marrow, providing evidence of an active dose
- MGTA-117 is the first targeted ADC in the clinic as a single agent prior to transplant and has been well tolerated

Transition to Transplant-Eligible AML & MDS

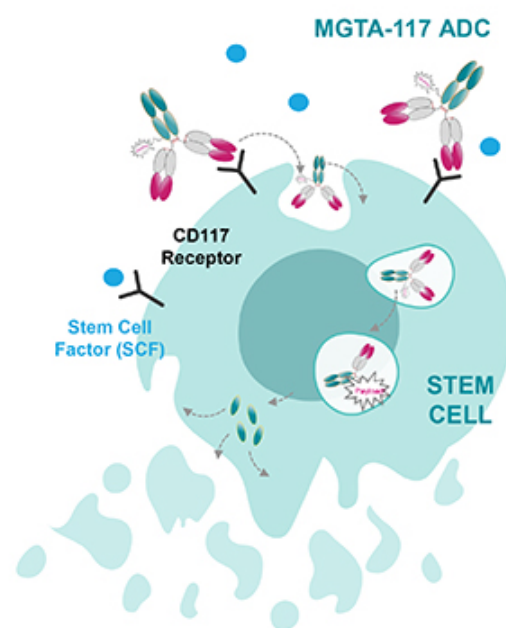
- Plan to transition an active dose to patients with transplant-eligible AML/MDS prior to receiving a RIC allogeneic transplant
- Regulatory feedback expected in Q1 2023
- Transplant-eligible study design and data expectations to be shared in Q1 2023

Advance into Gene Therapy

- Plan to develop with gene therapy partners
- Anticipate engaging regulatory agencies with the same data package (Cohorts 1-3) in H1 2023

Acknowledgements

- Thank you to our trial participants and their loved ones
- Thank you to the 117-HEM-101 trial investigators and their site staff



Q&A



APPENDIX

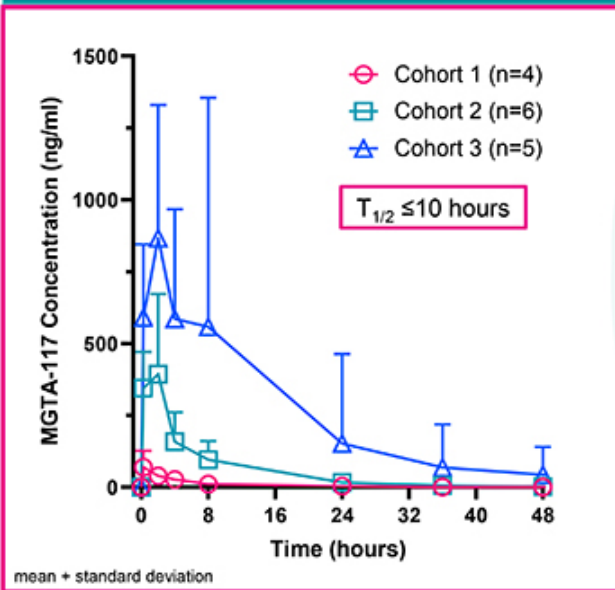


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MGTA-117 Rapidly Cleared From the Blood Without ADC Degradation

Pharmacokinetics (n=15)



Key Results

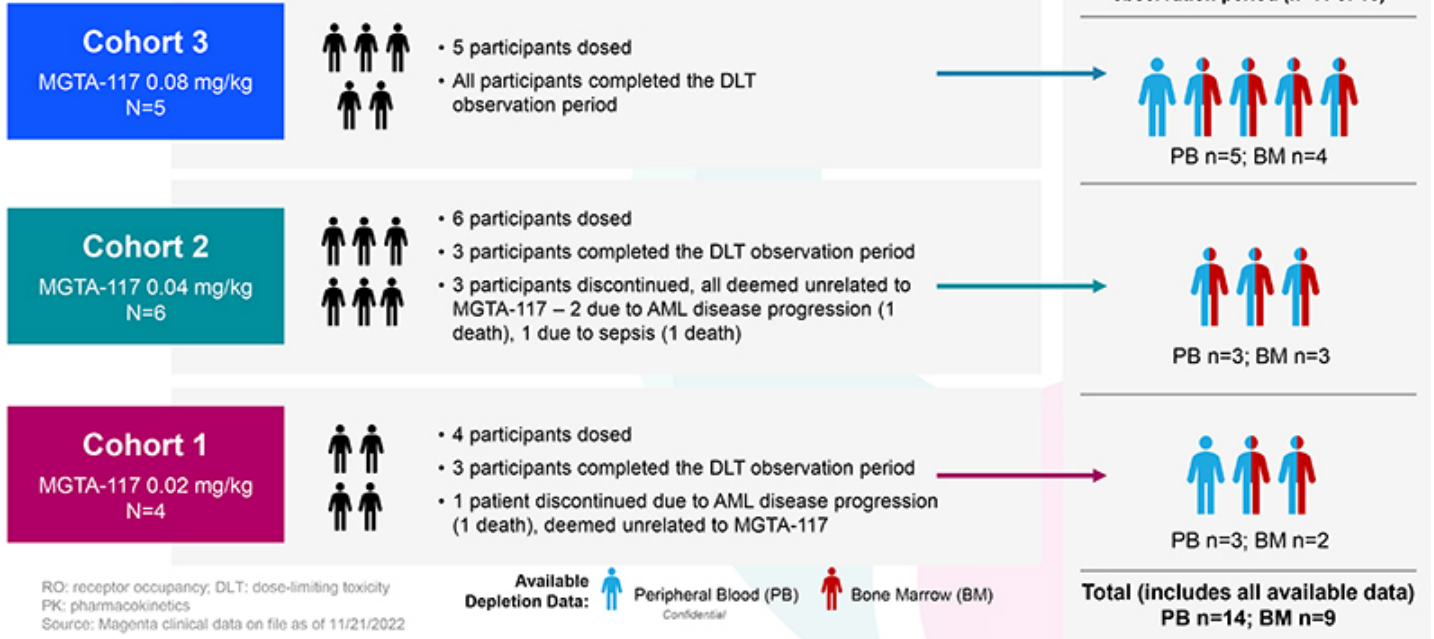
- Maximum concentrations of MGTA-117 were reached within an average of 2 hours after dosing (n=15)
- MGTA-117 showed rapid clearance - >95% clearance 48 hours after dosing
- Confirmed *in vivo* stability of ADC: no free payload detectable at any timepoint after dosing (n=15)

Availability of Data Across Phase 1/2 Cohorts 1-3

Participant discontinuations from the study were all deemed unrelated to MGTA-117

PARTICIPANTS DOSED (N=15 for RO, Tolerability; N=12 for PK)

Participants completing DLT observation period (n=11 of 15)



RO: receptor occupancy; DLT: dose-limiting toxicity
 PK: pharmacokinetics
 Source: Magenta clinical data on file as of 11/21/2022