



## Magenta Therapeutics Announces Multiple Presentations Across Stem Cell Transplant Portfolio at The American Society of Hematology (ASH) Annual Meeting

November 4, 2020

- *Magenta will present a total of five abstracts, including an oral presentation highlighting clinical and preclinical data across its mobilization and conditioning pipeline –*
- *Oral presentation of completed Phase I clinical trial confirms that MGTA-145, a novel biologic, robustly mobilized large numbers of functional hematopoietic stem cells (HSCs) for autologous and allogeneic stem cell transplant –*
- *Additional preclinical data of MGTA-145 demonstrated successful collection of HSCs, mediating potential enhanced engraftment and reduced GvHD in models compared to G-CSF mobilized stem cells –*
- *Preclinical data from a study of MGTA-117, an ADC that targets CD117, demonstrate that it is an effective, potent conditioning agent with anti-leukemia activity with the potential to improve transplant outcomes in patients with acute myeloid leukemia (AML) –*
- *Preclinical data from a study of Magenta's CD45-ADC conditioning agent demonstrate ability to achieve complete chimerism in fully mismatched allogeneic hematopoietic stem cell transplant (HSCT), potentially offering a reduced toxicity single agent conditioning regimen –*

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Nov. 4, 2020-- [Magenta Therapeutics](#) (NASDAQ: MGTA), a clinical-stage biotechnology company developing novel medicines to bring the curative power of stem cell transplant to more patients, today announced that data across the portfolio will be presented at the American Society of Hematology (ASH) annual meeting, to be held December 5-8, 2020.

"These data demonstrate the progress of our clinical and preclinical pipeline to expand patient eligibility to safely and effectively benefit from a potentially curative stem cell transplant," said John Davis Jr., M.D., M.P.H., M.S., Head of Research & Development and Chief Medical Officer, Magenta Therapeutics. "Our ASH presentations give insight into the significant impact our mobilization and conditioning programs stand to make for a broad range of patient populations. We look forward to advancing this pipeline further in 2021, with several anticipated data milestones ahead."

### **Oral Presentation Showcasing Clinical Data of MGTA-145 Stem Cell Mobilization Program:**

Magenta is developing MGTA-145 to be the first-line therapy for same-day mobilization and collection of hematopoietic stem cells (HSCs) for transplant, to enable successful rebuilding of the blood and immune system. MGTA-145 has the potential to be used across a broad range of diseases, including genetic diseases, such as sickle cell disease, as well as blood cancers, and autoimmune diseases.

All primary and secondary endpoints were met in the MGTA-145 Phase 1 trial in healthy volunteers completed earlier this year. By the end of 2020, Magenta intends to initiate multiple Phase 2 clinical trials of MGTA-145. These trials, including both allogeneic and autologous transplant settings across multiple diseases, are intended to evaluate mobilization and collection of functional hematopoietic stem cells and engraftment of these cells in patients after transplant.

**Title:** MGTA-145, in Combination with Plerixafor in a Phase 1 Clinical Trial, Mobilizes Large Numbers of Human Hematopoietic Stem Cells and a Graft with Immunosuppressive Effects for Allogeneic Transplant (Oral Abstract #184)

**Presenting Author:** Steven M. Devine, MD, Center for International Blood and Marrow Transplant Research, National Marrow Donor Program / Be The Match

**Date and Time of Oral Presentation:** Saturday, December 5, 2020, 12:15pm PT

These clinical data provide further confirmation that MGTA-145, in combination with plerixafor, provides a rapid and reliable method to obtain large numbers of functional hematopoietic stem cells for both autologous and allogeneic stem cell transplantation with preclinical data demonstrating enhanced engraftment and reduced Graft-versus-Host disease (GvHD).

### **Preclinical Data from Magenta's Antibody-Drug Conjugate Conditioning Programs**

Pre-transplant patient conditioning is a critical component necessary to prepare a patient's body to receive the edited cells, which carry the corrected gene and must engraft in the patient's bone marrow to be effective. Targeted antibody-drug conjugates (ADCs) are designed to selectively and rapidly remove disease-causing cells in the body and enable immune and blood system reset and long-term engraftment, without the need for aggressive chemotherapy or radiation.

Magenta expects to generate initial clinical data in 2021 in MGTA-117, the Company's clinical candidate for ADC-based conditioning for stem cell transplant and gene therapy and its most advanced conditioning program.

**Title:** A Single Dose of a Novel Anti-Human CD117-Amanitin Antibody Drug Conjugate (ADC) Engineered for a Short Half-life Provides Dual Conditioning and Anti-Leukemia Activity and Extends Survival Compared to Standard of Care in Multiple Preclinical Models of Acute Myeloid Leukemia (AML) (Abstract #1044)

**Presenting Author:** Leanne Lanieri, M.S., Magenta Therapeutics

**Date and Time to View Poster Presentation:** Saturday, December 5, 2020, 7:00am to 3:30pm PT

These preclinical data show that a single dose of MGTA-117, a targeted ADC, was effective as a conditioning agent for transplant, and significantly decreased peripheral tumor burden leading to delayed tumor growth and increase median survival rates. MGTA-117 has potential to serve as an effective, potent conditioning and anti-leukemia agent, improving HSCT outcomes in patients with acute myeloid leukemia (AML). MGTA-117 was well-tolerated in all three AML xenograft models, both as a single- and multi-dose regimen.

**Title:** Single Agent CD45-Targeted Antibody Drug Conjugate Enables Full Mismatch Allogeneic Hematopoietic Stem Cell Transplantation in a Murine HSCT Model (Abstract #2330)

**Presenting Author:** Bruce Blazar, M.D., Regents Professor of Pediatrics in the Division of Blood and Marrow Transplantation, University of Minnesota

**Date and Time to View Poster Presentation:** Sunday, December 6, 2020, 7:00am to 3:30pm PT

Magenta's CD45-ADC program targets CD45, a protein expressed on immune cells and blood stem cells and is designed to remove the cells that cause autoimmune diseases to enable curative immune reset. Magenta has identified a lead antibody for its CD45-ADC program for blood and immune system reset and IND-enabling work continues to advance.

Preclinical data in this abstract show that a single dose of CD45-ADC for conditioning enabled complete chimerism in a fully mismatched allogeneic HSCT model, which may provide a reduced toxicity conditioning regimen for patients with malignant and non-malignant blood disorders, among other diseases.

#### **Additional Posters:**

**Title:** Reversing Clonal Hematopoiesis and Associated Atherosclerotic Disease by Targeted Antibody Drug Conjugate (ADC) Conditioning and Transplant (Abstract #1843)

**Presenting Author:** Karin Gustafsson, Ph.D., Massachusetts General Hospital and Harvard University

**Date and Time to View Poster Presentation:** Sunday, December 6, 2020, 7:00am to 3:30pm PT

**Title:** MGTA-145/Plerixafor-Mediated HSC Mobilization and Intravenous HDAd5/35++ Vector Injection into Mice Allows for Efficient *in vivo* HSC Transduction and Stable Gene Marking in Peripheral Blood Cells of CD46-Transgenic and Thalassemia Mice (Abstract #2602)

**Presenting Author:** Chang Li, Ph.D., Division of Medical Genetics, Department of Medicine, University of Washington

**Date and Time to View Poster Presentation:** Monday, December 7, 2020, 7:00am to 3:30pm PT

#### **About Magenta Therapeutics**

Magenta Therapeutics is a clinical-stage biotechnology company developing medicines to bring the curative power of immune system reset through stem cell transplant to more patients with autoimmune diseases, genetic diseases and blood cancers. Magenta is combining leadership in stem cell biology and biotherapeutics development with clinical and regulatory expertise, a unique business model and broad networks in the stem cell transplant world to revolutionize immune reset for more patients.

Magenta is based in Cambridge, Mass. For more information, please visit [www.magentatx.com](http://www.magentatx.com).

Follow Magenta on Twitter: @magentatx.

#### **Forward-Looking Statement**

This press release may contain forward-looking statements and information within the meaning of The Private Securities Litigation Reform Act of 1995 and other federal securities laws. The use of words such as "may," "will," "could," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "projects," "seeks," "endeavor," "potential," "continue" or the negative of such words or other similar expressions can be used to identify forward-looking statements. The express or implied forward-looking statements included in this press release are only predictions and are subject to a number of risks, uncertainties and assumptions, including, without limitation risks set forth under the caption "Risk Factors" in Magenta's Annual Report on Form 10-K filed on March 3, 2020, as updated by Magenta's most recent Quarterly Report on Form 10-Q and its other filings with the Securities and Exchange Commission. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this press release may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Although Magenta believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, except as required by law, neither Magenta nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements included in this press release. Any forward-looking statement included in this press release speaks only as of the date on which it was made. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by law.

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