Magenta Therapeutics Presents Preclinical Data on MGTA-145, First-Line Stem Cell Mobilization Product Candidate for Autologous and Allogeneic Bone Marrow Transplant

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-- A single dose of MGTA-145 plus plerixafor mobilized two to three times more stem cells in non-human primates than multi-day regimen of current standard of care G-CSF --

-- Cells mobilized with MGTA-145 plus plerixafor rapidly engrafted in non-human primates following autologous transplant --

-- MGTA-145-mobilized cells from non-human primates suppressed GvHD and extended survival in preclinical models --

-- MGTA-145 to enter the clinic in the first half of 2019 --

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Feb. 21, 2019-- Magenta Therapeutics (NASDAQ: MGTA), a clinical-stage biotechnology company developing novel medicines to bring the curative power of bone marrow transplant to more patients, today announced that the Company presented new preclinical research on its MGTA-145 product candidate for stem cell mobilization at the Transplant and Cellular Therapy (TCT) annual meeting. Magenta is developing MGTA-145 as a first-line agent to enable single-day mobilization and collection of high numbers of hematopoietic stem cells for bone marrow transplant. MGTA-145 works synergistically with plerixafor, another stem cell mobilization product, to rapidly mobilize large numbers of stem cells.

“The data presented at TCT this week highlight MGTA-145 as a promising first-line stem cell mobilization therapy for both autologous and allogeneic transplant that is differentiated from G-CSF, the current standard of care. We showed that a single injection of MGTA-145, used in combination with plerixafor, mobilized two to three times more stem cells in a preclinical model than a multi-day regimen of G-CSF and allowed same-day mobilization and collection. We are particularly encouraged to see that the high doses of stem cells mobilized with the MGTA-145 combination led to rapid engraftment after autologous transplant in non-human primates,” said John Davis, M.D., M.P.H, chief medical officer, Magenta Therapeutics. “Additional data in non-human primates will be presented later this week demonstrating that the MGTA-145 combination mobilizes high numbers of monocytic cells, which have immunosuppressive properties. These monocytic cells have been shown to block GvHD, a significant challenge in allogeneic transplant, in preclinical models. Based on these encouraging results, we are completing the IND-enabling work for MGTA-145 and will be moving this program into the clinic in the first half of this year.”

**MGTA-145 In Combination with Plerixafor Mobilizes High Numbers of Hematopoietic Stem Cells that Lead to Rapid Engraftment Following Autologous Transplantation in Non-Human Primates, Poster #306**

Key results, presented by Patrick Falahee, Ph.D., Magenta Therapeutics:

- A single injection of MGTA-145 plus plerixafor mobilized 2 to 3 times the number of stem cells in four to six hours compared to the number mobilized over five days with standard of care agent G-CSF in non-human primates.
- MGTA-145 plus plerixafor successfully mobilized high numbers of stem cells in two of two non-human primates. Both non-human primates subsequently received an autologous transplant with the mobilized cells and achieved successful and rapid engraftment, as measured by neutrophil and platelet recovery.

In contrast, only one of two non-human primates mobilized with a multi-day course of G-CSF was able to achieve a dose of stem cells sufficient for transplant

**Co-Administration of MGTA-145 and Plerixafor Rapidly Mobilizes High Numbers of Hematopoietic Stem Cells and Graft- Versus-Host Disease-Inhibiting Monocytic Cells in Non-Human Primates, Poster #427**

Key results will be presented by Patrick Falahee, Ph.D., Magenta Therapeutics, on Saturday, February 23rd, 2019.

- MGTA-145 plus plerixafor leads to an increase in immunosuppressive monocytes mobilized compared to G-CSF
- MGTA-145-mobilized cells from non-human primates suppressed GvHD and extended survival in preclinical models

**About Magenta Therapeutics**

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

**Forward-Looking Statement**

This press release may contain forward-looking statements, including express or implied statements regarding Magenta’s future expectations, plans and prospects, including projections regarding future revenues and financing performance, our long-term growth, the anticipated timing of our clinical trials and regulatory filings, the development of our product candidates and advancement of our preclinical programs, as well as other statements containing the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “potential,” “project,” “should,” “target,” “will” or “would” and similar expressions that constitute forward-looking statements under the Private Securities Litigation Reform Act of 1995. Although Magenta’s forward-looking statements reflect the good faith judgment of its management, these statements are based on facts and factors currently known by Magenta. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning
Magenta’s programs and operations are described in additional detail in its registration statement on Form S-1, its Quarterly Report on Form 10-Q and its other filings made with the Securities and Exchange Commission from time to time. Any forward-looking statement made in this press release speaks only as of the date on which it is made. Magenta undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

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