



Magenta Therapeutics Presents First Immune Reset Results with Antibody-Drug Conjugate Across Multiple Autoimmune Diseases at ACR

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-- Single dose of CD45-ADC shown to remove disease-causing cells and halt disease in models of multiple sclerosis, systemic sclerosis and inflammatory arthritis --

-- Magenta exercises option with Heidelberg Pharma for antibody-drug conjugates using an amanitin payload and targeting CD45 --

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Nov. 11, 2019-- Magenta Therapeutics (NASDAQ: MGTA), a clinical-stage biotechnology company developing novel medicines to bring the curative power of stem cell transplant to more patients, today reported new data showing successful immune reset with a single dose of its CD45-ADC in models of three autoimmune diseases. These results were presented yesterday at the American College of Rheumatology (ACR) Annual Meeting in Atlanta, Ga.

"Millions of patients worldwide live with debilitating autoimmune diseases, with no options for curative therapy," said John Davis, M.D, M.P.H., Chief Medical Officer, Magenta. "Magenta is developing targeted medicines such as CD45-ADC to enable more patients with autoimmune diseases to undergo a one-time, curative immune reset. The data presented at ACR provide important proof of concept for our immune reset platform across a broad range of diseases, including multiple sclerosis and systemic sclerosis. We expect to declare a development candidate and progress this medicine into IND-enabling studies next year as we work to allow more patients to live their lives without autoimmune disease."

Current standard treatment for patients with multiple sclerosis involves years of chronic dosing of medications that do not halt the progression of the disease. For patients with systemic sclerosis, a potentially fatal disease, there are no approved therapies. Immune reset through stem cell transplant has demonstrated durable remissions in thousands of patients with autoimmune diseases such as multiple sclerosis and systemic sclerosis, and it is recommended by the European League Against Rheumatism (EULAR) in treatment guidelines for systemic sclerosis. The immune reset process involves two main steps: removing the disease-causing cells and replacing them with healthy cells to rebuild the immune system to a healthy state.

Magenta is the only company developing targeted antibody-drug conjugates designed to precisely remove the disease-causing cells in the body without the need for chemotherapy or radiation. Magenta's CD45-ADC program targets CD45, a protein expressed on immune cells and stem cells, and is designed to remove the cells that cause autoimmune diseases to enable curative immune reset.

Multiple Sclerosis Results

Data at ACR showed that a single dose of CD45-ADC removed disease-causing reactive T cells, enabled successful immune reset and rebuild of the immune system and was well tolerated in a reliable murine model of autoimmune disease, the EAE model. Further, a single dose of CD45-ADC significantly reduced disease incidence and delayed disease onset in this model that has successfully provided preclinical proof of concept for many clinically validated standard-of-care therapies.

Systemic Sclerosis Results

Data at ACR showed that a single dose of CD45-ADC eliminated disease-causing effector cells and ameliorated disease in a humanized murine model of systemic sclerosis with skin involvement. Mice treated with CD45-ADC showed clear resolution of skin lesions and regrowth of hair, while animals treated with an isotype ADC showed no improvement. CD45-ADC was well tolerated.

Inflammatory Arthritis Results

Data at ACR showed that a single dose of CD45-ADC enabled immune reset and rebuild and halted disease progression in a murine model of inflammatory arthritis. The disease-modifying effects of this well-tolerated one-time approach were equivalent to multiple doses of a neutralizing anti-TNF α antibody, which replicates a clinically validated approach to treatment of rheumatoid arthritis.

Magenta Exercises Option for CD45 Target from Heidelberg Pharma

Magenta also announced today that it has exercised its option with Heidelberg Pharma for exclusive worldwide development and marketing rights for antibody-drug conjugates using an amanitin payload and targeting CD45. Heidelberg Pharma will receive an undisclosed milestone payment in return.

In March 2018, the companies signed an exclusive multi-target research agreement under which Magenta gained access to Heidelberg Pharma's amanitin toxin-linker platform technology. Under the collaboration, Magenta may apply Heidelberg Pharma's proprietary amanitin technology for up to four exclusive targets to produce novel Antibody Targeted Amanitin Conjugates. Heidelberg Pharma is entitled to receive development and sales-related milestone payments totaling \$85 million per selected target. Magenta selected CD117 as its first target and exercised that option in October 2018.

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, without limitation, statements regarding expectations and plans for presenting pre-clinical and clinical data, projections regarding future revenues and financing performance, our long-term growth, cash, cash equivalents and marketable securities, 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. The express or implied forward-looking statements included in this press release are only predictions and are subject to a number of risks, uncertainties and assumptions, including, without limitation: uncertainties inherent in clinical studies and in the availability and timing of data from ongoing clinical studies; whether interim results from a clinical trial will be predictive of the final results of the trial; whether results from preclinical studies or earlier clinical studies will be predictive of the results of future trials; the expected timing of submissions for regulatory approval or review by governmental authorities, including review under accelerated approval processes; orphan drug designation eligibility; regulatory approvals to conduct trials or to market products; whether Magenta’s cash resources will be sufficient to fund Magenta’s foreseeable and unforeseeable operating expenses and capital expenditure requirements; and other risks concerning Magenta’s programs and operations are described in additional detail in its registration statement on Form S-1, its Annual Report on Form 10-K filed on March 19, 2019, its Quarterly Reports on Form 10-Q and its other filings made with the Securities and Exchange Commission from time to time. Although Magenta’s forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Magenta. As a result, you are cautioned not to rely on these forward-looking statements. 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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