



## **Mustang Bio Announces Updates on CAR T Cell Therapy Clinical Trials with City of Hope**

*First-of-its-kind Phase 1 clinical trial using intraventricular delivery of CAR T cells to brains of patients with HER2-positive breast cancer with brain metastases now enrolling patients*

*First patient dosed in Phase 1 clinical trial of HER2-specific memory-enriched T cells in treating recurrent or refractory grade III-IV glioma*

**New York, NY – October 30, 2018** – Mustang Bio, Inc. (“Mustang”) (NASDAQ: MBIO), a company focused on the development of novel immunotherapies based on proprietary chimeric antigen receptor engineered T cell (CAR T) technology and gene therapies for rare diseases, today announced that a Phase 1 clinical trial evaluating the safety and effectiveness of intraventricular delivery of CAR T cells to the brains of patients with HER2-positive breast cancer with brain metastases has been initiated.

The trial, which is being conducted by City of Hope, a world-renowned independent cancer research and treatment center, is expected to enroll 21 patients, many of whom are likely to be women with HER2-positive breast cancer. According to the American Cancer Society, about 1 in 5 patients with breast cancer have HER2-positive cancer cells. Nearly half of patients with HER2-positive breast cancer develop brain metastases.

Manuel Litchman, M.D., President and Chief Executive Officer of Mustang, said, “We are pleased that this innovative clinical trial, which is the first to deliver HER2-specific CAR T cell therapy directly to the brains of patients whose breast cancer has metastasized to the brain, is now underway. There are currently few treatments available for these patients, and we are hopeful that our CAR T cell therapy will offer a safe and effective option to treat this terrible disease.”

The trial’s primary objective is to determine the safety and recommended Phase 2 dosing of intraventricular delivery of HER2-specific CAR T cells. Secondary objectives include assessing cerebrospinal fluid (CSF) and peripheral blood for HER2-CAR T cell persistence and endogenous immune system activation, describing changes in cytokine levels in the CSF and peripheral blood and describing changes in circulating tumor cells in the CSF.

In addition, Mustang has announced that City of Hope has dosed the first patient in a Phase 1 clinical trial of HER2-specific CAR T cells in treating recurrent or refractory grade III-IV glioma. The trial will evaluate the side effects and best dose of HER2-specific CAR T cells in treating patients with grade III-IV glioma that has come back or does not respond to treatment.

Dr. Litchman added, “The advancement of these clinical trials marks an exciting time for Mustang. We look forward to learning more about how we can better treat patients with HER2-positive brain metastases or gliomas.”

## **About Mustang Bio**

Mustang Bio, Inc. (“Mustang”) is a clinical-stage biopharmaceutical company focused on the development and commercialization of a broad range of proprietary chimeric antigen receptor engineered T cell (CAR T) immunotherapies and gene therapies in areas of unmet need. Mustang aims to acquire rights to these technologies by licensing or otherwise acquiring an ownership interest, to fund research and development, and to outlicense or bring the technologies to market. Mustang has partnered with top medical institutions to advance the development of CAR T and CRISPR/Cas9-enhanced CAR T therapies across multiple cancers, as well as a lentiviral gene therapy for XSCID. Mustang is registered under the Securities Exchange Act of 1934, as amended, and files periodic reports with the U.S. Securities and Exchange Commission. For more information, visit [www.mustangbio.com](http://www.mustangbio.com).

## **Forward-Looking Statements**

This press release may contain “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, each as amended. Such statements include, but are not limited to, any statements relating to our growth strategy and product development programs and any other statements that are not historical facts. Forward-looking statements are based on management’s current expectations and are subject to risks and uncertainties that could negatively affect our business, operating results, financial condition and stock value. Factors that could cause actual results to differ materially from those currently anticipated include: risks relating to our growth strategy; our ability to obtain, perform under and maintain financing and strategic agreements and relationships; risks relating to the results of research and development activities; risks relating to the timing of starting and completing clinical trials; uncertainties relating to preclinical and clinical testing; our dependence on third-party suppliers; our ability to attract, integrate and retain key personnel; the early stage of products under development; our need for substantial additional funds; government regulation; patent and intellectual property matters; competition; as well as other risks described in our SEC filings. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations or any changes in events, conditions or circumstances on which any such statement is based, except as required by law.

## **Company Contact:**

Jaclyn Jaffe  
Mustang Bio, Inc.  
(781) 652-4500  
[ir@mustangbio.com](mailto:ir@mustangbio.com)

## **Investor Relations Contact:**

Jeremy Feffer  
Managing Director, LifeSci Advisors, LLC  
(212) 915-2568  
[jeremy@lifesciadvisors.com](mailto:jeremy@lifesciadvisors.com)

## **Media Relations Contact:**

Tony Plohoros  
6 Degrees  
(908) 940-0135  
[tplohoros@6degreespr.com](mailto:tplohoros@6degreespr.com)