Mustang Bio Announces License Agreement with CSL Behring for the Cytegrity™ Stable Producer Cell Line for the Production of MB-107 Lentiviral Gene Therapy

New York, NY – August 27, 2019 – Mustang Bio, Inc. ("Mustang") (NASDAQ: MBIO), a clinical-stage biopharmaceutical company focused on translating today's medical breakthroughs in cell and gene therapies into potential cures for hematologic cancers, solid tumors and rare genetic diseases, today announced that it has entered into a license agreement with CSL Behring for the Cytegrity™ stable producer cell line developed and used by St. Jude Children's Research Hospital ("St. Jude"). Cytegrity™ stable producer cell line will be used to produce the viral vector for Mustang Bio's MB-107 lentiviral gene therapy program for the treatment of X-linked severe combined immunodeficiency (XSCID). Mustang licensed MB-107 from St. Jude in August 2018.

MB-107 is currently being assessed in two Phase 1/2 clinical trials for XSCID: the first in newly-diagnosed infants under the age of two (ClinicalTrials.gov Identifier: NCT01512888) and the second in patients over the age of two who have received prior hematopoietic stem cell transplantation (ClinicalTrials.gov Identifier: NCT01306019). Positive Phase 1/2 clinical data from the trial for infants under the age of two were published in the *New England Journal of Medicine* in April. The U.S. Food and Drug Administration (FDA) granted Regenerative Medicine Advanced Therapy (RMAT) designation to MB-107 for the treatment of XSCID earlier this month.

Manuel Litchman, M.D., President and Chief Executive Officer of Mustang, said, "We are pleased to execute this agreement with CSL Behring to bring its Cytegrity™ stable producer cell line to Mustang's manufacturing facility. The Cytegrity™ stable producer cell line is critical to producing the viral vector for MB-107 as we prepare for commercialization and is an important competitive advantage vis-à-vis programs that use a conventional transient system for vector production. We plan to meet with the FDA later this year to achieve agreement on our regulatory path forward and expect to transfer sponsorship of the IND from St. Jude to Mustang by year-end."

About Mustang Bio

Mustang Bio, Inc. ("Mustang") is a clinical-stage biopharmaceutical company focused on translating today's medical breakthroughs in cell and gene therapies into potential cures for hematologic cancers, solid tumors and rare genetic diseases. 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. Mustang was founded by Fortress Biotech, Inc. (NASDAQ: FBIO). For more information, visit 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.

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