



## Mustang Bio and Nationwide Children's Hospital Enter into Exclusive Worldwide License Agreement for Oncolytic Virus (C134) to Treat Glioblastoma Multiforme

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Phase 1 trial underway at the University of Alabama at Birmingham in recurrent glioblastoma multiforme



Mustang intends to combine the oncolytic virus (C134) with MB-101 (IL13R $\alpha$ 2-specific CAR) to potentially enhance efficacy in treating glioblastoma multiforme

NEW YORK and COLUMBUS, Ohio, Feb. 20, 2019 (GLOBE NEWSWIRE) -- 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, and Nationwide Children's Hospital ("Nationwide"), one of America's largest not-for-profit freestanding pediatric health care systems providing wellness, preventive, diagnostic, treatment and rehabilitative care for infants, children and adolescents, as well as adult patients with congenital disease, announced today that they have partnered and entered into an exclusive worldwide license agreement to develop an oncolytic virus (C134) for the treatment of glioblastoma multiforme.

A Phase 1 clinical trial evaluating C134, an attenuated herpes simplex virus type 1 (HSV-1), in recurrent glioblastoma multiforme is being conducted at the University of Alabama at Birmingham ("UAB"). The trial is led by Dr. James Markert, M.D., Chairman of the Department of Neurosurgery at UAB, who developed C134 in collaboration with Dr. Kevin Cassidy, M.D., Associate Professor of Pediatrics at Nationwide Children's Hospital. C134 is a second-generation HSV-1 oncolytic virus that has improved replication in tumors in murine models, but with the same toxicity profile as its first-generation predecessors. In these preclinical studies, it not only demonstrates direct anti-tumor activity, but also elicits an immune response that can reverse tumor-associated immunosuppression.

Subsequent clinical trials will investigate a combination treatment of MB-101 (IL13R $\alpha$ 2-specific CAR) and C134. These trials are supported by preclinical studies that have appeared to demonstrate the synergistic potential of an oncolytic virus, which can induce an anti-tumor immune response when combined with CAR-T therapy to target solid tumors.

"Oncolytic viruses often trigger an immune response directed at tumors that are otherwise refractory to single agent immunotherapies. Our oncolytic virus C134 has demonstrated promising preclinical activity and we look forward to working with Mustang to advance its development in the clinic," Dr. Kevin Cassidy said.

Manuel Litchman, M.D., President and Chief Executive Officer of Mustang, said, "We are very pleased to partner with Nationwide Children's Hospital to develop oncolytic virus C134. We also plan to evaluate oncolytic virus C134 in combination with MB-101 to explore the potential synergies of this novel combination to treat patients with glioblastoma. At Mustang, we are committed to evaluating our CAR T therapies alone and in combination regimens with the goal of advancing treatment paradigms for cancers without alternate therapies."

### About Mustang Bio

Mustang Bio, Inc. ("Mustang"), a Fortress Biotech (NASDAQ: FBIO) company, 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 X-SCID. 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).

### About Fortress Biotech

Fortress Biotech, Inc. ("Fortress") is an innovative biopharmaceutical company focused on identifying, in-licensing and developing high-potential clinical-stage assets. The company has over 25 programs in clinical development at Fortress, at its majority-owned and majority-controlled subsidiaries and at entities it founded and in which it holds significant minority ownership positions. Such product candidates span six large-market therapeutic areas, including oncology, rare diseases and gene therapy, which allow it to create value while mitigating risk for shareholders. Fortress advances its diversified pipeline through a streamlined operating structure that fosters efficient drug development. The Fortress model is driven by a world-class business development team that is focused on leveraging its significant biopharmaceutical industry expertise to further expand the company's portfolio of product opportunities. Fortress has established partnerships with some of the world's leading academic research institutions and biopharmaceutical companies to maximize each opportunity to its full potential, including Alexion Pharmaceuticals, Inc., City of Hope, Fred Hutchinson Cancer Research Center, InvaGen Pharmaceuticals, Inc. (a subsidiary of Cipla Limited), St. Jude Children's Research Hospital and UCL Business PLC. For more information, visit [www.fortressbiotech.com](http://www.fortressbiotech.com).

### About Nationwide Children's Hospital

Named to the Top 10 Honor Roll on U.S. News & World Report's 2018-19 list of "Best Children's Hospitals," Nationwide Children's Hospital is one of America's largest not-for-profit freestanding pediatric health care systems providing wellness, preventive, diagnostic, treatment and rehabilitative care for infants, children and adolescents,

as well as adult patients with congenital disease. Nationwide Children's has a staff of more than 13,000 providing state-of-the-art pediatric care during more than 1.4 million patient visits annually. As home to the Department of Pediatrics of The Ohio State University College of Medicine, Nationwide Children's physicians train the next generation of pediatricians and pediatric specialists. The Abigail Wexner Research Institute at Nationwide Children's Hospital is one of the Top 10 National Institutes of Health-funded freestanding pediatric research facilities. More information is available at [NationwideChildrens.org](http://NationwideChildrens.org).

#### **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 Contacts:**

Jaclyn Jaffe and William Begien  
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)

#### **Nationwide Children's Hospital Contact:**

Andrew Corris  
Sr. Licensing Associate  
(614) 355-1604  
[Andrew.corris@nationwidechildrens.org](mailto:Andrew.corris@nationwidechildrens.org)



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