Assembly Biosciences and Door Pharmaceuticals Sign Collaboration and Option Agreement to Develop a Novel Class of HBV Core Protein Modulators

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SOUTH SAN FRANCISCO, Calif., Nov. 16, 2020 (GLOBE NEWSWIRE) -- Assembly Biosciences, Inc. (Nasdaq: ASMB) and Door Pharmaceuticals, LLC today announced that the companies have signed an exclusive, two-year collaboration and option agreement focused on the development of a novel class of hepatitis B virus (HBV) core protein modulators. Door Pharmaceuticals' innovative discovery platform targets functions of core protein distinct from viral assembly and that have the potential to interfere with viral nucleic acid including cccDNA transcription, providing a strong complement to Assembly Bio's current portfolio.

Under the terms of the agreement, Door Pharmaceuticals will build upon its previous efforts to lead and conduct new discovery research, which will be funded by Assembly Bio. In return for an up-front payment and success-based milestones and royalties, Assembly Bio will be granted an exclusive option to license compounds arising from the collaboration and will be responsible for the continued development and commercialization of optioned compounds. Financial details were not disclosed.

"Door Pharmaceuticals was established by our co-founder, Adam Zlotnick, whose research led to the successful discovery of the core inhibitor candidates that comprise Assembly Bio's clinical program," said William Delaney, PhD, Chief Scientific Officer, Virology of Assembly Biosciences. "Adam is a true innovator, and this collaboration is a natural continuation of our work together. We're excited to build upon our current pipeline of HBV core inhibitors with additional contributions from a science-driven company that shares our passion and focus for bringing new treatment options to patients facing HBV."

"I'm thrilled at the opportunity to once again contribute to the advancement of Assembly Bio's core inhibitor platform under this new collaboration," said Adam Zlotnick, PhD, Founder of Door Pharmaceuticals. "There is a clear mechanistic rationale for the potential role that core inhibitors can play in the treatment of HBV, and it is our hope and belief that the complementary mechanisms of action of these core protein modulators will offer an important therapeutic pathway towards HBV cure."

About HBV
Chronic hepatitis B virus (HBV) infection is a debilitating disease of the liver that afflicts over 250 million people worldwide with up to 90 million people in China, as estimated by the World Health Organization. HBV is a global epidemic that affects more people than hepatitis C virus (HCV) and HIV infection combined—with a higher morbidity and mortality rate. HBV is a leading cause of chronic liver disease and need for liver transplantation, and up to one million people worldwide die every year from HBV-related causes.

The current standard of care for patients with chronic HBV infection is life-long suppressive treatment with medications that reduce, but do not eliminate, the virus, resulting in very low cure rates. There is a significant unmet need for new therapies to treat HBV.

About Assembly Biosciences
Assembly Biosciences, Inc. is a clinical-stage biotechnology company developing innovative therapeutics targeting hepatitis B virus (HBV) and diseases associated with the microbiome. The HBV program is focused on advancing a new class of potent, oral core inhibitors that have the potential to increase cure rates for chronically infected patients. The microbiome program is developing novel oral live microbial biotherapeutic candidates with Assembly Bio's fully integrated platform, including a robust process for strain identification and selection, GMP manufacturing expertise and targeted delivery to the lower gastrointestinal tract with the GEMICEL® technology. For more information, visit **assemblybio.com**.

About Door Pharmaceuticals
Door Pharmaceuticals was founded in 2018 by leading HBV researcher, Adam Zlotnick, PhD, a professor of molecular and cellular biochemistry at Indiana University; he is also a fellow of the American Academy of Microbiology and of the AAAS. The company is focused on research of virus structural proteins to discover new classes of inhibitors. The company is initially focused on HBV, with the vision to realize the potential for novel therapeutics for other viruses.

Forward-Looking Statements
The information in this press release contains forward-looking statements that are subject to certain risks and uncertainties that could cause actual results to materially differ. These risks and uncertainties include: the Door collaboration may not yield any novel assets and we may not exercise our option with respect to any collaboration compounds; Assembly Bio's ability to initiate and complete clinical trials involving its HBV therapeutic product candidates in the currently anticipated timeframes; safety and efficacy data from clinical studies may not warrant further development of Assembly Bio's product candidates; clinical and

nonclinical data presented at conferences may not differentiate Assembly Bio's product candidates from other companies' candidates; Assembly Bio may not observe sustained virologic response in patients who stop therapy in Study 211; Assembly Bio's ability to maintain financial resources necessary to continue its clinical trials and fund business operations; any impact that the spread of the coronavirus and resulting COVID-19 pandemic may have on Assembly Bio's business and operations, including initiation and continuation of its clinical trials or timing of discussions with regulatory authorities; and other risks identified from time to time in Assembly Bio's reports filed with the U.S. Securities and Exchange Commission (the SEC). You are urged to consider statements that include the words may, will, would, could, should, might, believes, hopes, estimates, projects, potential, expects, plans, anticipates, intends, continues, forecast, designed, goal or the negative of those words or other comparable words to be uncertain and forward-looking. Assembly Bio intends such forward-looking statements to be covered by the safe harbor provisions contained in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. More information about Assembly Bio's risks and uncertainties are more fully detailed under the heading "Risk Factors" in Assembly Bio's filings with the SEC, including its most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Except as required by law, Assembly Bio assumes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

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