Assembly Biosciences to Present Data in Four Poster Presentations at Upcoming AASLD The Liver Meeting®

October 24, 2022

Four poster presentations, including two late breaking, highlight breadth and promise of virology portfolio

Data demonstrating preclinical activity of next-generation core inhibitor ABI-4334 against hepatitis B virus supports planned advancement into clinical studies before year end

SOUTH SAN FRANCISCO, Calif., Oct. 24, 2022 (GLOBE NEWSWIRE) -- Assembly Biosciences, Inc. (Nasdaq: ASMB), a clinical-stage biotechnology company developing innovative, investigational therapeutics targeting hepatitis B virus (HBV) and other viral diseases, today announced that clinical and preclinical data from its virology portfolio will be featured in four poster presentations, including two late breaker presentations, at the upcoming American Association for the Study of Liver Diseases (AASLD), The Liver Meeting®, taking place November 4-8, 2022, in Washington, DC.

The presentations will include preclinical data supporting the advancement of the company's next-generation core inhibitor candidate, ABI-4334 (4334), into clinical development for the treatment of hepatitis B virus (HBV), with a Phase 1a trial expected to start in H2 2022. Data highlighting the preclinical characterization of Assembly Bio's novel small molecule viral entry inhibitor for HBV and hepatitis delta virus (HDV) will also be presented. Additionally, two poster presentations accepted as late-breaking abstracts will focus on Assembly Bio's interferon-α receptor (IFNAR) agonist research program and the ongoing Phase 2 study evaluating first-generation core inhibitor vebicorvir in combination with Arbutus Biopharma's AB-729 in HBV.

"We look forward to presenting data at AASLD's The Liver Meeting that demonstrate the promise of our pipeline, strength of our science and breadth of our expanded research efforts," said William Delaney, PhD, chief scientific officer of Assembly Bio. "Notably, we will highlight preclinical data exploring the activity of our highly potent next-generation core inhibitor 4334 against the formation of cccDNA, the HBV viral reservoir. We will also present for the first time preclinical data from our oral viral entry inhibitor research program introduced earlier this year, which builds upon our core inhibitor portfolio with a complementary mechanism against HBV while also extending our research focus to HDV."

Details of the poster presentations are as follows; presentation details on the two additional late-breaking posters will be available closer to the meeting:

- **Poster Presentation #1119:** ABI-4334, a novel hepatitis B virus core inhibitor, accelerates capsid assembly and inhibits cccDNA formation via multiple pathways
  First Author: Nuruddin Unchwaniwala, PhD, Assembly Bio
  Session: Posters
  Date and Time: Friday, November 4, 2022, 12:00 p.m. ET
- **Poster Presentation #1132:** Preclinical characterization of a novel class of highly potent small molecule hepatitis B and D virus entry inhibitors
  First Author: Heidi Contreras, PhD, Assembly Bio
  Session: Posters
  Date and Time: Friday, November 4, 2022, 12:00 p.m. ET

AASLD Presentations and Posters
Presentations and posters are expected to be made available online to conference registrants through The Liver Meeting Digital Experience™ at https://www.aasld.org/the-liver-meeting/digital-experience within 72 hours of presentation. The full posters will be available online at the "Events & Presentations" page in the "Investors" section of Assembly's website at **www.assemblybio.com**.

About Assembly Biosciences
Assembly Bio is a clinical-stage biotechnology company pioneering the development of novel therapeutics for serious viral diseases. Assembly Bio is advancing a leading portfolio of more potent, next-generation core inhibitor drug candidates that aim to break the complex viral replication cycle of hepatitis B virus (HBV) to achieve finite and potentially curative therapies for the 296 million people living with HBV worldwide. The company's research pipeline includes differentiated antiviral approaches against HBV/hepatitis delta virus and herpesviruses. For more information, visit assemblybio.com.

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: Assembly Bio's ability to successfully execute its previously announced reprioritization and restructuring activities, including the CEO transition; potential adverse legal, reputational, operational and financial effects on Assembly Bio resulting from the reprioritization and restructuring activities; Assembly Bio's ability to initiate and complete clinical studies involving its therapeutic product candidates, including studies contemplated by Assembly Bio's collaboration agreements, 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; results of nonclinical studies may not be representative of disease behavior in a clinical setting and may not be predictive of the outcomes of clinical studies; continued development and commercialization of ABI-H3733, if successful, in the China territory will be dependent on, and subject to, Assembly Bio's collaboration agreement governing this activity in the China territory; Assembly Bio's ability to maintain financial resources necessary to continue its clinical studies and fund business operations; any impact that the COVID-19 pandemic may have on Assembly Bio's business and operations, including initiation, enrollment and continuation of its clinical studies 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.

Contacts

Investor and Corporate:
Shannon Ryan
SVP, Investor Relations, Corporate Affairs and Alliance Management
(415) 738-2992
sryan@assemblybio.com

Media:
Sam Brown Inc.
Hannah Hurdle
(805) 338-4752
ASMBMedia@sambrown.com