Assembly Biosciences Abstracts Selected for Presentation at the Upcoming AASLD The Liver Meeting®

November 1, 2021

HBV core inhibitor data will be highlighted in one oral and two poster presentations, including one late breaking

SOUTH SAN FRANCISCO, Calif., Nov. 01, 2021 (GLOBE NEWSWIRE) -- Assembly Biosciences, Inc. (Nasdaq: ASMB), a clinical-stage biotechnology company developing innovative therapeutics targeting hepatitis B virus (HBV), today announced that clinical and preclinical data from its HBV core inhibitor program will be featured in one oral and two poster presentations, including one late breaking, during the American Association for the Study of Liver Diseases (AASLD) The Liver Meeting®. The presentations include updates from the clinical studies of vebicorvir (VBR) and ABI-H3733, as well as the newly selected preclinical core inhibitor candidate, ABI-4334. AASLD will be hosted virtually November 12-15, 2021.

"The Liver Meeting offers a valuable opportunity to further advance our understanding of HBV and liver disease, while gaining access to the latest cutting-edge research from the world's leading liver disease experts," said John McHutchison, AO, MD, chief executive officer and president of Assembly Bio. "We continue to believe that therapeutics targeting the HBV core protein will offer a long-awaited breakthrough for individuals living with HBV, and we are excited to share what we've learned through our latest findings. This year, we're also looking forward to more formally introducing the AASLD community to ABI-4334, a new compound with a potential best-in-class preclinical profile including single digit nanomolar potency against the formation of cccDNA."

- **Oral Presentation #96:** *HBV pgRNA and DNA both rebound immediately following discontinuation of the core inhibitor vebicorvir despite continued NrtI treatment in patients with HBeAg positive chronic hepatitis B virus infection: Findings from a Phase 2 open label study*
  Presenter: *Man-Fung Yuen, MD, PhD, DSc, Queen Mary Hospital, University of Hong Kong*
  Session: Parallel 13: Novel HBV Therapies and Approaches
  Date and Time: Sunday, November 14, 2021, 10:00 AM – 11:30 AM ET

- **Poster Presentation #842:** *Safety and pharmacokinetics of ABI-H3733, a novel 2nd-generation HBV core inhibitor: Results from a Phase 1a study in healthy volunteers*
  Presenter: Edward Gane, MBChB, MD FRACP, MNZM, New Zealand Liver Transplant Unit, Auckland City Hospital, New Zealand
  Session: Hepatitis B: Therapeutics: New Agents

- **Late-breaking Poster LP4:** *Preclinical characterization of ABI-4334, a novel, highly potent core inhibitor for the treatment of chronic hepatitis B virus infection*
  Presenter: Kathryn M. Kitrinos, PhD, Vice President, Clinical Virology, Assembly Biosciences
  Session: Late-breaking Abstract Posters

AASLD Presentations and Posters
Presentations and posters are expected to be made available to conference registrants through the online AASLD portal at 8:00 am ET Friday, November 12, and will be available subsequently on 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 committed to bringing finite and curative therapies to the 270 million people living with hepatitis B virus (HBV) worldwide. A pioneer in the development of a new class of potent, oral core inhibitor drug candidates, Assembly Bio's approach aims to break the complex viral replication cycle of HBV to free patients from a lifetime of therapy. Assembly Bio's strategy toward cure includes a leading portfolio of more potent, next-generation core inhibitors, proof-of-concept combination studies and a research program focused on the discovery of novel HBV targets. 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 initiate and complete clinical studies involving its HBV therapeutic product candidates, including studies contemplated by Assembly Bio's clinical 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 Assembly Bio's HBV product candidates, if successful, in the China territory will be dependent on, and subject to, Assembly Bio's collaboration agreement governing its 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 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.

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