Preclinical Data from Assembly Biosciences' Microbiome Program in Ulcerative Colitis Featured in DDW 2020 Virtual Meeting Portal and Upcoming Journal Supplements

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SOUTH SAN FRANCISCO, Calif., May 04, 2020 (GLOBE NEWSWIRE) -- Assembly Biosciences, Inc. (Nasdaq: ASMB), a clinical-stage biotechnology company developing innovative therapeutics targeting hepatitis B virus (HBV) and diseases associated with the microbiome, today announced that the abstract accepted as an ePoster presentation at Digestive Disease Week (DDW) 2020 Virtual Meeting may now be viewed at the online meeting portal. The ePoster includes preclinical data from the Company's microbiome program in ulcerative colitis (UC) and is also scheduled for publication in the May online supplements to the journals *Gastroenterology* and *GIE: Gastrointestinal Endoscopy*. A copy of the ePoster is available on Assembly Biosciences' website .

"We are pleased that these important preclinical data supporting our lead clinical-stage candidate ABI-M201 were selected for presentation at DDW's Virtual Meeting," said Jackie Papkoff, PhD, Senior Vice President, Chief Scientific Officer at Assembly Biosciences. "These data showcase the strength of our live microbial biotherapeutic discovery platform to develop well-defined consortia of bacteria, rationally selected based on disease-relevant mechanisms. Our aim is to use this approach to advance novel therapeutics that may provide meaningful clinical benefit to patients."

ePoster Title: A Rationally Selected, Orally Administered, Live Biotherapeutic Consortium of Commensal Bacteria for the Treatment of Ulcerative Colitis

Assembly's lead live biotherapeutic product (LBP) candidate, ABI-M201, is being evaluated in a multi-center randomized, double-blind, placebo-controlled Phase 1b trial in patients with mildly to moderately active UC and ongoing treatment with mesalamine. Additional information about the trial is available at ClinicalTrials.gov, Identifier: NCT03923478. In 2017, Assembly granted Allergan an exclusive worldwide license for rights to ABI-M201 in certain gastrointestinal indications, including UC.

About Assembly Biosciences' Microbiome Platform
From concept to clinic, Assembly has developed an integrated live biotherapeutic product (LBP) program from discovery through manufacturing that features an in-house bacterial strain inventory, creating a broad-based platform that is capable of addressing multiple therapeutic indications. Individual bacteria and consortia are selected for development based on a platform of in silico, *in vitro* and *in vivo* capabilities. The biologic drug candidates are manufactured under scalable GMP conditions. Assembly's in-house, end-to-end capabilities also include its in-licensed patented GEMICEL® capsule-in-capsule oral delivery system designed for targeted dual release within the lower gastrointestinal tract (GI). Assembly's discovery and development capabilities and manufacturing expertise also are being leveraged to advance new proprietary candidates for other disease indications.

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'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.

Forward-Looking Statements
The information in this press release contains forward-looking statements regarding future events, including statements about the potential of our microbiome discovery platform and our microbiome therapeutic product candidates. It is possible that the ongoing clinical trial involving ABI-M201 yields unfavorable or indeterminate results and we may not be able to complete such clinical trial on the currently anticipated timelines or at all. In addition, the results of nonclinical studies may not be predictive of future clinical study results and our microbiome therapeutic product candidates may not warrant further development. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. Assembly 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. Actual results or developments may differ materially from those projected or implied in these forward-looking statements. These risks and uncertainties include, among others: the components, timing, cost and results of clinical trials and other development activities involving our product candidates; whether our cash resources will be sufficient to fund continuing operations for the periods and/or trials. More information about the risks and uncertainties faced by Assembly are more fully detailed under the heading "Risk Factors" in Assembly's Annual Report on Form 10-K for the year ended December 31, 2019 filed with the Securities and Exchange Commission. Except as required by law, Assembly 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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