May 19, 2015

Assembly Biosciences Discusses Mechanism of Action of Its HBV Antiviral Program at 2nd ANRS HBV Cure Workshop

Workshop Sponsored by French National Agency for Research on AIDS and Viral Hepatitis

NEW YORK and PARIS, May 19, 2015 (GLOBE NEWSWIRE) -- Assembly Biosciences, Inc. (Nasdaq:ASMB) today announced that Adam Zlotnick, PhD, Assembly's Chief Scientific Advisor and Chair of its HBV & Virology Science Advisory Board, discussed the science underlying the company's Core Protein Allosteric Modifiers (CpAMs) at the Second ANRS HBV Cure Workshop sponsored by the French National Agency for Research on AIDS and Viral Hepatitis (ANRS). Assembly's CpAMs are in development for the curative treatment of hepatitis B viral infection (HBV).

For more than 25 years, ANRS has played an important role in the global fight against HIV/AIDs. Recently ANRS added viral hepatitis to its mandate. The invitation-only HBV Cure Workshop brings together leading scientists whose work could advance the development of curative therapies for HBV.

Dr. Zlotnick, who conducted the seminal work on CpAMs in his laboratory at Indiana University, commented, "We wanted to share with our fellow scientists how Assembly's insights into the complexities of the HBV core protein and its lifecycle are informing our CpAM antiviral program. Our ability to leverage different classes of CpAMs to target allosteric properties of core protein allows us to engineer and select molecules that interfere with multiple locations in the viral lifecycle, both 'upstream' and 'downstream' of formation of the viral capsid."

In his presentation, Dr. Zlotnick described how the HBV core protein is not a single rigid defined structure, nor does it serve solely to assemble the capsid. Rather the core protein assumes multiple structures to accomplish a wide variety of different activities. The importance of its many functions makes core protein an excellent target for antiviral therapies. Additionally, the dynamic nature of the protein makes it susceptible to control by allosteric modifiers. While some researchers are focusing on self-assembly as the most accessible core protein activity for antiviral intervention, Assembly's antiviral program leverages the allosteric nature of the core protein's interactions to design modulators that engage the broader spectrum of core protein functions across the viral lifecycle. This broader approach is central to Assembly's program to develop clinically curative therapies for HBV.

Uri Lopatin, MD, Chief Medical Officer and Vice President of R&D at Assembly, also attended the Workshop. He noted, "We are delighted that Adam's thought leadership on core protein and its multiple functions is being recognized by the ANRS. Adam's presentation highlighted the protean nature of core protein along with preliminary data showing how our approach targets core protein both upstream and downstream in the lifecycle. This provides us a unique ability to generate distinctive allosteric molecules that can reduce viral replication, as well as the production of viral antigens such as HBsAg. Our growing understanding of the viral core protein is enabling us to make good progress in advancing the CpAM program, and the feedback and dialogue from today's workshop provided additional confidence that we are on the right track."

About Assembly Biosciences

Assembly Biosciences, Inc. is a public biopharmaceutical company developing novel oral therapies for the cure of intractable infectious diseases, focusing on hepatitis B virus (HBV) and C. *difficile*-associated (CDAD) infections. Its HBV-Cure research team is discovering and developing multiple Core protein Allosteric Modifiers (CpAMs) to modulate the HBV core protein—a polyfunctional essential viral protein-—at multiple complementary points in the viral lifecycle. The goal is to eradicate HBV infection with an orally-administered regimen. Assembly is uniquely positioned to execute on this strategy, with a senior scientific team that has over 30 years of combined experience working on HBV. The company's CDAD program is based on the targeted delivery of novel microbiome-based therapies in a proprietary oral formulation. Assembly has created a network of world-class microbiome scientists from academia and industry to help advance this innovative program. For more information visit assemblybio.com.

Cautionary Statement Regarding Forward-Looking Statements

Please Note: The information provided herein contains estimates and other forward-looking statements regarding future events. Such statements are just predictions and are subject to risks and uncertainties that could cause the actual events or results to differ materially. These risks and uncertainties include, among others: our ability to retain necessary employees and to staff our operations appropriately; the components, timing, cost and results of clinical trials and other development activities involving our

product candidates; the unpredictability of the clinical development of our product candidates and of the duration and results of regulatory review of those candidates by the FDA and foreign regulatory authorities; our anticipated capital expenditures, our estimates regarding our capital requirements, and our need for future capital; and the possible impairment of, or inability to obtain, intellectual property rights and the costs of obtaining such rights from third parties. The reader is referred to the documents that we file from time to time with the Securities and Exchange Commission.

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Source: Assembly Biosciences