Gilead Sciences Exercises Option to License Assembly Biosciences' Helicase-Primase Inhibitor Programs for Recurrent Genital Herpes

December 22, 2025

– Weekly Oral Helicase-Primase Inhibitor Programs' Early Data Potentially Supportive of First New Treatment for Recurrent Genital Herpes in 25 Years –

FOSTER CITY, Calif. & SOUTH SAN FRANCISCO, Calif.--(BUSINESS WIRE)--Dec. 22, 2025-- Gilead Sciences, Inc. (Nasdaq: GILD) and Assembly Biosciences, Inc. (Nasdaq: ASMB), today announced Gilead has exercised its combined option to exclusively license Assembly Bio's herpes simplex virus (HSV) helicase-primase inhibitor programs, including long-acting investigational candidates ABI-1179 and ABI-5366 for recurrent genital herpes. These represent the first programs Gilead will advance under the ongoing Assembly Bio R&D collaboration, reinforcing the companies' commitment to building a novel antiviral pipeline and driving long-term growth through innovative therapies addressing significant unmet needs.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20251222410533/en/

Genital herpes, caused by HSV, is a chronic infection that leads to painful lesions, psychological and social stigma, and an increased risk of HIV acquisition. Over four million people in the U.S. and major European countries experience recurrent genital herpes, with HSV type 2 (HSV-2) infections typically associated with multiple recurrences each year. No new therapies have been approved for HSV in the U.S. or Europe for more than 25 years.

"At Gilead, we develop novel antiviral therapeutics that aim to deliver meaningful solutions that improve the lives of people affected by serious viral infections. Our research partnership with Assembly Bio has been highly fruitful, and we are excited to continue the clinical development of our herpes simplex virus candidates," said Jared Baeten, MD, PhD, Senior Vice President, Clinical Development, Virology Therapeutic Area Head, Gilead Sciences. "Collaborations and partnerships are key in the pursuit of life-changing innovations."

ABI-1179 and ABI-5366 are novel long-acting inhibitors of viral helicase-primase, an enzyme essential for herpes virus replication with the potential to improve chronic suppressive therapy for recurrent genital herpes. Positive interim Phase 1b data for ABI-5366 and ABI-1179 demonstrated strong antiviral activity and improvements in clinical outcomes, including significant reduction in virus-positive lesions. Both compounds also exhibit pharmacokinetic and safety profiles supportive of once-weekly oral dosing.

"We are pleased Gilead has opted in to advance the helicase-primase program for recurrent genital herpes," said Jason Okazaki, Chief Executive Officer and President of Assembly Bio. "This milestone reflects the strength of our collaboration and the potential of our antiviral pipeline. With Gilead's proven track record in developing and commercializing antiviral medicines, exercising this option is an important step forward as they take control of ABI-5366 and ABI-1179 and advance closer to delivering long-awaited new treatment options to patients suffering from recurrent genital herpes."

Terms of the Transaction

Under the terms of the 2023 collaboration agreement between Gilead and Assembly Bio, Assembly Bio will receive a $35 million payment for Gilead's exercise of the combined HSV program option, which comprises both ABI-5366 and ABI-1179. The $35 million payment reflects a $45 million option fee, net of $10 million accelerated funding Assembly Bio received under a December 2024 amendment, which was creditable against future payments. Gilead will receive an exclusive license to ABI-5366 and ABI-1179 and will have the sole right and responsibility for further clinical development and commercialization of these programs.

Assembly Bio remains eligible for up to $330 million in regulatory and commercial milestones, as well as tiered royalties on net sales. Assembly Bio will also have the right to opt in to share 40% of all costs and profits in the United States in lieu of receiving milestones and royalties for that program in the United States after receipt of development plans and budgets from Gilead next year.

About Gilead Sciences

Gilead Sciences, Inc. is a biopharmaceutical company that has pursued and achieved breakthroughs in medicine for more than three decades, with the goal of creating a healthier world for all people. The company is committed to advancing innovative medicines to prevent and treat life-threatening diseases, including HIV, viral hepatitis, COVID-19, cancer, and inflammation. Gilead

operates in more than 35 countries worldwide, with headquarters in Foster City, Calif.

About Assembly Biosciences

Assembly Biosciences is a biotechnology company dedicated to the development of innovative small-molecule therapeutics designed to change the path of serious viral diseases and improve the lives of patients worldwide. Led by an accomplished team of leaders in virologic drug development, Assembly Bio is committed to improving outcomes for patients struggling with the serious, chronic impacts of herpesvirus, HBV and HDV infections. For more information, visit assemblybio.com.

Gilead Forward-Looking Statements

This press release includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks, uncertainties and other factors, including Gilead's ability to realize the anticipated benefits from the collaboration; difficulties or unanticipated expenses in connection with the collaboration and the potential effects on Gilead's earnings; the ability of Gilead to initiate, progress or complete clinical trials within currently anticipated timelines or at all, and the possibility of unfavorable results from ongoing or additional trials, including those involving programs developed pursuant to the collaboration, such as ABI-1179 and ABI-5366; the ability of Gilead to file applications for regulatory approval or receive regulatory approvals in a timely manner or at all for the investigational programs developed pursuant to the partnership, and the risk that any such approvals, if granted, may be subject to significant limitations on use or subject to withdrawal or other adverse actions by the applicable regulatory authority; the possibility that Gilead may make a strategic decision to discontinue development of any of the investigational programs developed pursuant to the collaboration, and therefore these programs may never be successfully commercialized; and any assumptions underlying any of the foregoing. These and other risks, uncertainties and other factors are described in detail in Gilead's Quarterly Report on Form 10-Q for the quarter ended September 30, 2025, as filed with the U.S. Securities and Exchange Commission. These risks, uncertainties and other factors could cause actual results to differ materially from those referred to in the forward-looking statements. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. The reader is cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties and is cautioned not to place undue reliance on these forward-looking statements. All forward-looking statements are based on information currently available to Gilead, and Gilead assumes no obligation and disclaims any intent to update any such forward-looking statements.

Assembly Bio 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 realize the potential benefits of its collaboration with Gilead, including all financial aspects of the collaboration and equity investments; Assembly Bio's ability to initiate and complete clinical studies involving its therapeutic product candidates, including studies contemplated by Assembly Bio's collaboration with Gilead, in the currently anticipated timeframes or at all; safety and efficacy data from clinical or nonclinical studies may not warrant further development of Assembly Bio's product candidates; clinical and nonclinical data may not differentiate Assembly Bio's product candidates from other companies' candidates; Assembly Bio's ability to maintain financial resources and secure additional funding necessary to continue its research activities, clinical studies, and other business operations; potential effects of changes in government regulation, including as a result of the change in U.S. administration in 2025; 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; 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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For more information about Gilead, please visit the company's website at www.gilead.com, follow Gilead on X/Twitter (@Gilead Sciences) and LinkedIn (@Gilead-Sciences).

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Source: Gilead Sciences, Inc.