Gilead Announces Findings from New Preclinical Study Evaluating Novel Class of HIV Capsid Inhibitors

February 13, 2017 6:47 PM ET

– Findings Support Continued Investigation of Inhibitor Class as Part of a Long-Acting Antiretroviral HIV Treatment Strategy –

SEATTLE--(BUSINESS WIRE)--Feb. 13, 2017-- Gilead Sciences, Inc. (NASDAQ:GILD) today announced findings from a preclinical study evaluating HIV capsid inhibitors (CAIs) for potential use as a long-acting antiretroviral (ARV) treatment. The study identified novel HIV-1 capsid inhibitors with highly potent antiviral activity and a favorable resistance profile to existing ARVs in vitro. The data are being presented in an oral session (Session O-4) at the 2017 Conference on Retroviruses and Opportunistic Infections (CROI) in Seattle.

“Capsid inhibition is a previously unexplored target for antiviral therapy and we are pleased to share these preclinical results showing the potential role of this class of therapy as a novel, long-acting injectable for HIV treatment and prevention in the future,” said Norbert Bischofberger, PhD, Executive Vice President, Research and Development and Chief Scientific Officer, Gilead Sciences. “This research represents Gilead’s ongoing commitment to innovation in the field of HIV and our work to advance treatments for people living with the disease.”

The preclinical study found that GS-CA1, an exemplified member of a novel class of CAIs, is a highly potent inhibitor of HIV-1 replication in human peripheral blood mononuclear cells (PBMCs) (EC_{50} = 140 pM) and displays similar potency against multiple HIV-1 clinical isolates from all major clades. The study also found that the identified CAIs bind to a broadly conserved site at the interface of two adjacent monomers within a capsid hexamer and accelerate capsid assembly in vitro.

The identified CAIs maintained full activity in vitro against HIV-1 mutants resistant to licensed antiretrovirals (ARVs) and selected for HIV capsid variants L56I, M66I, Q67H or N74D with an attenuated in vitro replication phenotype. Preclinical mechanistic studies revealed a dual mode of action targeting both the late-stage virion maturation and post-entry capsid functions. GS-CA1 showed high in vitro metabolic stability and displayed an extended-release preclinical pharmacokinetic profile following a single subcutaneous administration that maintained target plasma concentrations for over 10 weeks.

Gilead plans to evaluate a selected development candidate in Investigational New Drug (IND)-enabling toxicology studies and begin Phase 1 clinical trials in 2018.

GS-CA1 is an investigational therapy and has not been determined to be safe or efficacious.

About Gilead Sciences

Gilead Sciences is a biopharmaceutical company that discovers, develops and commercializes innovative therapeutics in areas of unmet medical need. The company’s mission is to advance the care of patients suffering from life-threatening diseases. Gilead has operations in more than 30 countries worldwide, with headquarters in Foster City, California.

Forward-Looking Statement

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. In addition, we may be unable to begin Phase 1 clinical trials in the currently anticipated timelines. In addition, we may observe unfavorable results from additional studies involving proprietary CAIs, including GS-CA1. In addition, Gilead may make a strategic decision to discontinue development of GS-CA1 and other proprietary investigational CAIs if, for example, Gilead believes commercialization will be difficult relative to other opportunities in its pipeline. As a result, GS-CA1 and other proprietary investigational CAIs may never be successfully commercialized. These risks, uncertainties and other factors could cause actual results to

differ materially from those referred to in the forward-looking statements. The reader is cautioned not to rely on these forward-looking statements. These and other risks are described in detail in Gilead's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, as filed with the U.S. Securities and Exchange Commission. All forward-looking statements are based on information currently available to Gilead, and Gilead assumes no obligation to update any such forward-looking statements.

For more information on Gilead Sciences, please visit the company's website at www.gilead.com, follow Gilead on Twitter (@GileadSciences) or call Gilead Public Affairs at 1-800-GILEAD-5 or 1-650-574-3000.

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