Gilead to Present New Data From Multiple Liver Disease Research and Development Programs at The International Liver Congress™ 2019

March 27, 2019

-- More Than 35 Abstracts Across NASH, PSC and Viral Hepatitis Reflect Ongoing Commitment to Advancing Liver Disease Research and Patient Care --

FOSTER CITY, Calif.--(BUSINESS WIRE)--Mar. 27, 2019-- Gilead Sciences, Inc. (Nasdaq: GILD) today announced that data from the company's research and development programs in nonalcoholic steatohepatitis (NASH), primary sclerosing cholangitis (PSC) and viral hepatitis will be presented at The International Liver Congress™ 2019 in Vienna, Austria from April 10-14, 2019. These data reflect Gilead's ongoing focus and commitment to advancing research and patient care across the field of liver disease.

"For 20 years, Gilead has been focused scientifically on the treatment of liver diseases and brought innovative medicines and access programs to people around the world," said John McHutchison, AO, MD, Chief Scientific Officer, Head of Research and Development, Gilead Sciences. "At this year's International Liver Congress, we are proud to share new data from studies that aim to improve our understanding of challenging liver diseases such as PSC, enable broader NASH diagnosis rates and strive to bring forward new therapies for patients with unmet medical needs in NASH and viral hepatitis."

Advanced Fibrosis due to NASH

Patients with advanced fibrosis due to NASH, defined as bridging fibrosis (F3) or cirrhosis (F4), are at a significantly higher risk of liver-related mortality. Gilead will share data on multiple investigational compounds, noninvasive testing for NASH diagnosis and patient-reported outcomes.

Data being presented at the meeting highlight the potential utility of investigational compounds in development to address this significant medical need.

- A combination of the ACC inhibitor GS-0976 and the non-steroidal FXR agonist GS-9674 improves hepatic steatosis and liver stiffness in patients with nonalcoholic steatohepatitis (NASH): a proof-of-concept study (poster #0352)
- The addition of fenofibrate to a liver-targeted acetyl CoA carboxylase inhibitor reverses plasma TG increases and positively impacts efficacy (poster #0284)

The diagnosis of advanced fibrosis due to NASH currently requires a liver biopsy, which is an invasive procedure that can lead to serious complications. Data evaluating the use of noninvasive tests for the identification of patients with advanced fibrosis will be presented at the meeting.

- Clinical utility and application of noninvasive tests of fibrosis in selection of patients with advanced fibrosis due to NASH in the Phase 2 ATLAS trial (poster #0315)
- Impact of age on routinely available noninvasive tests for the discrimination of advanced fibrosis due to NASH in the Phase 3 STELLAR trials of the ASK1 inhibitor selonsertib (poster #0273)

Data regarding patient-reported outcomes from Gilead's ongoing development program will also be presented.

- What are the predictors of impairment of patient-reported outcomes in non-alcoholic steatohepatitis (poster #0151)
- Patients with non-alcoholic steatohepatitis (NASH) experience severe impairment of health-related quality of life (HRQL) (poster #0348)
- The presence of type 2 diabetes is independently associated with impairment of patient-reported outcomes in patients with non-alcoholic steatohepatitis (poster #0438)

Cilofexor (GS-9674), firsocostat (GS-0976) and selonsertib are investigational compounds and are not approved by the U.S. Food and Drug Administration (FDA) or any other regulatory authority. Their safety and efficacy have not been established.

Primary Sclerosing Cholangitis (PSC)

PSC is a rare and chronic condition that causes inflammation and scarring of the bile ducts, which may lead to liver failure. The natural history and progression of the disease in patients are not well understood. Data being presented help inform future clinical development in PSC for which a large unmet need for effective therapy exists.

- Validation of histologic and noninvasive measures of fibrosis as surrogate endpoints of disease progression in patients with primary sclerosing cholangitis (PSC) (oral presentation #0012)
- Prospective evaluation of serum alkaline phosphatase variability and prognostic utility in primary sclerosing cholangitis using controlled clinical trial data (oral presentation #0016)
- Methylation signatures in blood show accelerated epigenetic aging in patients with primary sclerosing cholangitis compared to healthy controls (poster #0024)

Viral Hepatitis Treatment and Cure

Gilead is committed to improving care for people living with chronic hepatitis B virus (HBV) infection and delivering the potential for cure to all chronic hepatitis C virus (HCV) patients. New HBV and HCV data being presented include safety and efficacy findings with switching to Vemlidy® (tenofovir alafenamide 25mg, TAF) treatment in virologically suppressed HBV patients treated with tenofovir disoproxil fumarate (TDF), and safety and efficacy results with Epclusa® (sofosbuvir 400 mg/velpatasvir 100 mg) in difficult-to-cure HCV patients. Further evidence of the use of Epclusa and Harvoni® (ledipasvir 90mg/sofosbuvir 400mg) in a range of patient types and populations in the real-world setting will also be presented.

- A Phase 3 study comparing switching from tenofovir disoproxil fumarate to tenofovir alafenamide with continued TDF treatment in virologically-suppressed patients with chronic hepatitis B (CHB): week 48 efficacy and safety results (poster #0183)
- Bone and renal safety are improved in chronic HBV patients switched to tenofovir alafenamide (TAF) after either 2 or 3 years of prior tenofovir disoproxil fumarate (TDF) treatment (poster #0158)
- High efficacy and improvement in CPT class with sofosbuvir/velpatasvir plus ribavirin for 12 weeks in patients with CPT C decompensated cirrhosis (poster #0138)
- Ledipasvir/sofosbuvir for 8, 12, or 24 weeks is safe and effective in patients undergoing dialysis (poster #0144)
- Global real-world evidence of sofosbuvir/velpatasvir as a simple, effective regimen for the treatment of chronic hepatitis C patients: Integrated Analysis of 12 clinical practice cohorts (oral presentation #0003)

Finally, as part of Gilead's HBV cure program, the latest findings on the potential role of investigational GS-9688, will be presented.

- *In vitro* modulation by TLR8 agonist GS-9688 of multiple regulatory cell types in patients with chronic hepatitis B (poster #0132)

EPCLUSA and HARVONI are each indicated in the U.S. for the treatment of chronic HCV infection in patients with no cirrhosis or with compensated cirrhosis: EPCLUSA for adults with genotypes 1-6; and HARVONI for adults with genotypes 1, 4, 5 and 6. EPCLUSA in combination with ribavirin is indicated in the U.S. for the treatment of chronic HCV infection in patients with decompensated cirrhosis. VEMLIDY is indicated for the treatment of chronic HBV infection in adults with compensated liver disease. The US product labels for EPCLUSA, HARVONI, and VEMLIDY each contain a BOXED WARNING: for EPCLUSA and HARVONI, the risk of HBV reactivation in HCV/HBV co-infected patients; and for VEMLIDY, the risk of post-treatment severe acute exacerbation of HBV. See below for U.S. Important Safety Information.

The safety and efficacy of HARVONI in HCV patients undergoing dialysis has not been established.

GS-9688 is an investigational compound and is not approved by the FDA or any other regulatory authority. Its safety and efficacy has not been established.

For more information, including a complete list of abstract titles at the meeting, please visit: [https://ilc-congress.eu/programme-highlights/].

US Important Safety Information and Indications for Harvoni and Epclusa

BOXED WARNING: RISK OF HEPATITIS B VIRUS REACTIVATION IN HCV/HBV COINFECTED PATIENTS

Test all patients for evidence of current or prior hepatitis B virus (HBV) infection before initiating treatment with HARVONI or EPCLUSA. HBV reactivation has been reported in HCV/HBV coinfected patients who were undergoing or had completed treatment with HCV direct acting antivirals (DAAs) and were not receiving HBV antiviral therapy. Some cases have resulted in fulminant hepatitis, hepatic failure, and death. Cases have been reported in patients who are HBsAg positive, in patients with serologic evidence of resolved HBV, and also in patients receiving certain immunosuppressant or chemotherapeutic agents; the risk of HBV reactivation associated with treatment with HCV DAAs may be increased in patients taking these other agents. Monitor HCV/HBV coinfected patients for hepatitis flare or HBV reactivation during HCV treatment and post-treatment follow-up. Initiate appropriate patient management for HBV infection as clinically indicated.

Contraindications

If HARVONI or EPCLUSA is used in combination with ribavirin (RBV), all contraindications, warnings and precautions, in particular pregnancy avoidance, and adverse reactions to RBV also apply. Refer to RBV prescribing information.

Warnings and Precautions

Serious Symptomatic Bradycardia When Coadministered with Amiodarone: Amiodarone is not recommended for use with HARVONI or EPCLUSA due to the risk of symptomatic bradycardia, particularly in patients also taking beta blockers or with underlying cardiac comorbidities and/or with advanced liver disease. A fatal cardiac arrest was reported in a patient taking amiodarone who was coadministered a sofosbuvir containing regimen.

In patients without alternative, viable treatment options, cardiac monitoring is recommended. Patients should seek immediate medical evaluation if they develop signs or symptoms of bradycardia.

Risk of Reduced Therapeutic Effect Due to Use with P-gp Inducers and/or Moderate to Potent Inducers of CYP: Rifampin, St. John's wort and carbamazepine are not recommended for use with HARVONI or with EPCLUSA. P-gp inducers may significantly decrease ledipasvir, sofosbuvir and/or velpatasvir plasma concentrations. Moderate to potent inducers of CYP2B6, CYP2C8 or CYP3A4 may significantly decrease sofosbuvir and/or velpatasvir plasma concentrations.

Adverse Reactions

The most common adverse reactions (≥10%, all grades) with HARVONI were fatigue, headache, and asthenia.

The most common adverse reactions (≥10%, all grades) with EPCLUSA were headache and fatigue; and when used with RBV in decompensated cirrhotics were fatigue, anemia, nausea, headache, insomnia, and diarrhea.

Drug Interactions

HARVONI: Coadministration is not recommended withoxcarbazepine, phenobarbital, phenytoin, rifabutin, rifapentine, and tipranavir/ritonavir due to decreased concentrations of ledipasvir and sofosbuvir; or with co-formulated elvitegravir/cobicistat/emtricitabine/tenofovir disoproxil fumarate due to increased concentrations of tenofovir; or with simeprevir due to increased concentrations of ledipasvir and simeprevir; or with rosuvastatin due to increased concentrations of rosuvastatin.

EPCLUSA: Coadministration is not recommended with topotecan due to increased concentrations of topotecan; or with proton-pump inhibitors, oxcarbazepine, phenobarbital, phenytoin, rifabutin, rifapentine, efavirenz, and tipranavir/ritonavir due to decreased concentrations of sofosbuvir and/or velpatasvir.

Consult the full Prescribing Information for HARVONI and EPCLUSA for more information on potentially significant drug interactions, including clinical comments.

INDICATION for HARVONI

HARVONI is indicated for the treatment of adults with chronic hepatitis C virus genotype (GT) 1, 4, 5, or 6 infection without cirrhosis or with compensated cirrhosis. HARVONI is used with ribavirin in GT 1 adults with decompensated cirrhosis and in GT 1 or 4 adult liver transplant recipients without cirrhosis or with compensated cirrhosis.

INDICATION for EPCLUSA

EPCLUSA is indicated for the treatment of adults with chronic hepatitis C virus genotype 1, 2, 3, 4, 5, or 6 infection without cirrhosis or with compensated cirrhosis and in combination with ribavirin for those with decompensated cirrhosis.

US Important Safety Information and Indication for Vemlidy

BOXED WARNING: POST TREATMENT SEVERE ACUTE EXACERBATION OF HEPATITIS B

Discontinuation of anti-hepatitis B therapy, including VEMLIDY, may result in severe acute exacerbations of hepatitis B. Hepatic function should be monitored closely with both clinical and laboratory follow-up for at least several months in patients who discontinue anti-hepatitis B therapy, including VEMLIDY. If appropriate, resumption of anti-hepatitis B therapy may be warranted.

Warnings and Precautions

Risk of Development of HIV-1 Resistance in HBV/HIV-1 Coinfected Patients: Due to this risk, VEMLIDY alone should not be used for the treatment of HIV-1 infection. Safety and efficacy of VEMLIDY have not been established in HBV/HIV-1 coinfected patients. HIV antibody testing should be offered to all HBV-infected patients before initiating therapy with VEMLIDY, and, if positive, an appropriate antiretroviral combination regimen that is recommended for HBV/HIV-1 coinfected patients should be used.

New Onset or Worsening Renal Impairment: Cases of acute renal failure and Fanconi syndrome have been reported with the use of tenofovir prodrugs. In clinical trials of VEMLIDY, there have been no cases of Fanconi syndrome or proximal renal tubulopathy (PRT). Patients with impaired renal function and/or taking nephrotoxic agents (including NSAIDs) are at increased risk of renal-related adverse reactions. Discontinue VEMLIDY in patients who develop clinically significant decreases in renal function or evidence of Fanconi syndrome. Monitor renal function in all patients – See Dosage and Administration.

Lactic Acidosis and Severe Hepatomegaly with Steatosis: Fatal cases have been reported with the use of nucleoside analogs, including tenofovir disoproxil fumarate. Discontinue VEMLIDY if clinical or laboratory findings suggestive of lactic acidosis or pronounced hepatotoxicity develop, including hepatomegaly and steatosis in the absence of marked transaminase elevations.

Adverse Reactions

Most common adverse reactions (incidence ≥5%; all grades) were headache, abdominal pain, cough, back pain, fatigue, nausea, arthralgia, diarrhea, and dyspepsia.

Drug Interactions

Coadministration of VEMLIDY with drugs that reduce renal function or compete for active tubular secretion may increase concentrations of tenofovir and the risk of adverse reactions.

Coadministration of VEMLIDY is not recommended with the following: oxcarbazepine, phenobarbital, phenytoin, rifabutin, rifampin, rifapentine, or St. John’s wort. Such coadministration is expected to decrease the concentration of tenofovir alafenamide, reducing the therapeutic effect of VEMLIDY. Drugs that strongly affect P-glycoprotein (P-gp) and breast cancer resistance protein (BCRP) activity may lead to changes in VEMLIDY absorption.

Consult the full prescribing information for VEMLIDY for more information on potentially significant drug interactions, including clinical comments.

Dosage and Administration

- **Testing Prior to Initiation:** HIV infection.
- **Prior to or when initiating, and during treatment:** On a clinically appropriate schedule, assess serum creatinine, estimated creatinine clearance, urine glucose, and urine protein in all patients. In patients with chronic kidney disease, also assess serum phosphorus.
- **Dosage in Adults:** 1 tablet taken once daily with food.

- **Renal Impairment:** Not recommended in patients with end stage renal disease (ESRD; eCrCl <15 mL/min) who are not receiving chronic hemodialysis; in patients on chronic hemodialysis, on hemodialysis days, administer VEMLIDY after completion of hemodialysis treatment.
- **Hepatic Impairment:** Not recommended in patients with decompensated (Child-Pugh B or C) hepatic impairment.

INDICATION

VEMLIDY is indicated for the treatment of chronic hepatitis B virus infection in adults with compensated liver disease.

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 35 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, including the possibility of unfavorable results from ongoing and additional clinical trials involving cilofexor, selonsertib, firsocostat and GS-9688. Further, it is possible that the parties may make a strategic decision to discontinue development of cilofexor, selonsertib, firsocostat and/or GS-9688, and as a result, these compounds 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 Annual Report on Form 10-K for the year ended December 31, 2018, 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.

*U.S. Full Prescribing Information for Epclusa, Harvoni and Vemlidy including **BOXED WARNINGS**, are available at www.gilead.com.*

Epclusa, Harvoni and Vemlidy are registered trademarks of Gilead Sciences, Inc., or its related companies.

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.

View source version on businesswire.com: https://www.businesswire.com/news/home/20190327005306/en/

Source: Gilead Sciences, Inc.

Sung Lee, Investors
(650) 524-7792

Arran Attridge, Media
(650) 425-8975