



U.S. FDA Approves New Indications for Harvoni® and Sovaldi® in Pediatric Patients 12 Years and Older with Chronic Hepatitis C Infection

April 7, 2017

- First HCV Direct-Acting Antivirals Approved for Use in Adolescents -

FOSTER CITY, Calif.--(BUSINESS WIRE)--Apr. 7, 2017-- Gilead Sciences, Inc. (NASDAQ: GILD) today announced that the U.S. Food and Drug Administration (FDA) has approved supplemental indications for Harvoni® (ledipasvir 90 mg/sofosbuvir 400 mg) tablets and Sovaldi® (sofosbuvir 400 mg) tablets for the treatment of chronic hepatitis C virus (HCV) infection in adolescents without cirrhosis or with compensated cirrhosis, 12 years of age and older, or weighing at least 35kg. Harvoni was approved for pediatric patients with genotype 1, 4, 5 or 6 chronic HCV infection. Sovaldi was approved for pediatric patients with genotype 2 or 3 chronic HCV infection, in combination with ribavirin. There are an estimated 23,000-46,000 pediatric HCV patients in the United States, most of whom were infected with the virus at birth.

"The approvals of Sovaldi and Harvoni for pediatric patients will enable adolescents to finally benefit from interferon-free treatment for HCV infection," said Karen Murray, M.D., professor of pediatrics at the University of Washington School of Medicine and Seattle Children's. "These therapies address a significant unmet medical need and represent an important advance for HCV-infected adolescents."

"Gilead's goal is to develop and deliver treatments that provide all patients with HCV the potential to be cured," said Norbert Bischofberger, Ph.D., Executive Vice President of Research and Development and Chief Scientific Officer at Gilead. "For the first time, children 12 and older in the United States with genotypes 1 through 6 chronic HCV infection now have options of two direct-acting antiviral regimens that offer high cure rates while eliminating the need for interferon injections."

Harvoni and Sovaldi each have a boxed warning in their respective product labels regarding the risk of hepatitis B virus reactivation in HCV/HBV co-infected patients. See below for important safety information.

Harvoni for Pediatric Patients

The supplemental new drug application (sNDA) approval is supported by data from an open-label clinical trial (Study 1116), which evaluated 12 weeks of treatment with Harvoni once-daily in genotype 1 treatment-naïve and treatment-experienced HCV-infected adolescents 12 years of age and older without cirrhosis or with compensated cirrhosis. The SVR12 rate was 98 percent overall (98/100). No subject experienced on-treatment virologic failure or relapse. Two subjects were lost to follow-up.

Adverse events were consistent with those observed in clinical studies of Harvoni in adults. The most common adverse reactions (≥10 percent, all grades) observed with treatment with Harvoni in HCV-infected pediatric patients were fatigue, headache and asthenia.

Sovaldi for Pediatric Patients

The sNDA approval is supported by data from an open-label clinical trial (Study 1112), which evaluated 12 or 24 weeks of treatment with Sovaldi and weight-based ribavirin in adolescents 12 years of age and older with HCV genotype 2 or 3. The SVR12 rate was 100% (13/13) in genotype 2 patients and 97% (36/37) in genotype 3 patients. No subject experienced on-treatment virologic failure or relapse. One patient was lost to follow up.

Adverse events were consistent with those observed in clinical studies of Sovaldi in adults. The most common adverse reactions (≥15 percent, all grades) observed with treatment with Sovaldi and ribavirin for 12 or 24 weeks in HCV-infected pediatric patients were fatigue, headache and nausea.

U.S. Patient Support Program

To support these patients and their families, Gilead's U.S. Support Path® program provides information regarding access and reimbursement coverage options to patients in the United States who need assistance with coverage for their medications, including Harvoni and Sovaldi. Support Path conducts benefits investigations and provides patients with information regarding their insurance options.

Further, the Harvoni and Sovaldi Co-pay Coupon Programs offer co-pay assistance for eligible patients with private insurance who need assistance paying for out-of-pocket medication costs.

Information about how to enroll can be found at either <https://www.harvoni.com/support-and-savings/onward> or <https://www.sovaldi.com/coupons> or by calling 1-855-7-MYPATH (1-855-769-7284) between 9:00 a.m. and 8:00 p.m. (Eastern).

Important Safety Information for Harvoni

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. HBV reactivation has been reported in HCV/HBV coinfecting 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 coinfecting 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 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

- Risk of Serious Symptomatic Bradycardia When Coadministered with Amiodarone: Amiodarone is not recommended for use with Harvoni 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. 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 of Harvoni Due to P-gp Inducers: Rifampin and St. John's wort are not recommended for use with Harvoni as they may significantly decrease ledipasvir and sofosbuvir plasma concentrations.

Adverse Reactions

Most common (≥10%, all grades) adverse reactions were fatigue, headache and asthenia.

Drug Interactions

- In addition to rifampin and St. John's wort, coadministration of Harvoni is also not recommended with carbamazepine, oxcarbazepine, phenobarbital, phenytoin, rifabutin, rifapentine, and tipranavir/ritonavir. Such coadministration is expected to decrease the concentration of ledipasvir and sofosbuvir, reducing the therapeutic effect of Harvoni.
- Coadministration of Harvoni is not recommended with simeprevir due to increased concentrations of ledipasvir and simeprevir. Coadministration is also not recommended with rosuvastatin or co-formulated elvitegravir/cobicistat /emtricitabine/tenofovir disoproxil fumarate due to increased concentrations of rosuvastatin and tenofovir, respectively.

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

Important Safety Information for Sovaldi

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 Sovaldi. HBV reactivation has been reported in HCV/HBV coinfecting 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 coinfecting 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

- Contraindications to peginterferon alfa and ribavirin also apply to Sovaldi combination treatment. Refer to the prescribing information of peginterferon alfa and ribavirin for a list of their contraindications.

Warnings and Precautions

- Risk of Serious Symptomatic Bradycardia When Coadministered with Amiodarone and Another HCV Direct Acting Antiviral (DAA): Amiodarone is not recommended for use with Sovaldi in combination with another DAA 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. 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 of Sovaldi Due to Use with P-gp Inducers: Rifampin and St. John's wort are not recommended for use with Sovaldi as they may significantly decrease sofosbuvir plasma concentrations.
- Risk Associated with Combination Treatment: Because Sovaldi is used in combination with other antiviral drugs for the treatment of HCV infection, consult the Prescribing Information for these drugs.

Adverse Reactions

Most common (≥20%, all grades) adverse reactions for:

- Sovaldi + peginterferon alfa + ribavirin combination therapy were fatigue, headache, nausea, insomnia, and anemia
- Sovaldi + ribavirin combination therapy were fatigue and headache

Drug Interactions

- In addition to rifampin and St. John's wort, coadministration of Sovaldi is not recommended with carbamazepine, oxcarbazepine, phenobarbital, phenytoin, rifabutin, rifapentine, and tipranavir/ritonavir. Such coadministration is expected to decrease the concentration of sofosbuvir, reducing its therapeutic effect.

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, including the risk that physicians may not see the benefits of prescribing Harvoni or Sovaldi in pediatric patient populations with HCV infection. 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, 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.

*Full prescribing information for Harvoni and Sovaldi, including **BOXED WARNING**, is available at www.gilead.com.*

Harvoni and Sovaldi 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](https://twitter.com/GileadSciences)) or call Gilead Public Affairs at 1-800-GILEAD-5 or 1-650-574-3000.

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