

China National Drug Administration Approves Gilead's Genvoya® (Elvitegravir, Cobicistat, Emtricitabine and Tenofovir Alafenamide), a Single Tablet Regimen for the Treatment of HIV-1 Infection

August 6, 2018

- Genvoya is the First TAF-Based Regimen Approved in China for Adults and Adolescents with HIV –

FOSTER CITY, Calif.--(BUSINESS WIRE)--Aug. 6, 2018-- Gilead Sciences, Inc. (NASDAQ: GILD) announced today that the China National Drug Administration (CNDA) has approved Genvoya® (elvitegravir 150 mg/cobicistat 150 mg/emtricitabine 200 mg/tenofovir alafenamide 10 mg or E/C/F/TAF) for the treatment of HIV-1 infection. Genvoya is the first TAF-based single tablet regimen for the treatment of HIV to be approved in China.

Genvoya is indicated in China as a complete regimen for the treatment of adults and adolescents (aged 12 years and older with a body weight of at least 35 kg) infected with HIV-1 without any known mutations associated with resistance to the integrase inhibitor class, emtricitabine or tenofovir. In the United States, Genvoya has a boxed warning in its product label regarding the risks of post treatment acute exacerbation of hepatitis B. Further important safety information, adverse drug reactions and drug interactions are listed below.

“With access to appropriate treatment, people living with HIV have the potential to live nearly as long as the general population. Because of this, they may face increased risk of age- and treatment-related comorbidities, which means long-term health should be a priority when caring for patients with HIV,” said Professor Li Taisheng, Peking Union Medical College Hospital. “In clinical trials, Genvoya has demonstrated long-term viral suppression through 144 weeks and has a safety profile that may be appropriate for a broad range of people living with HIV.”

In 2017, there were approximately 140,000 people newly diagnosed with HIV in China. The number of diagnoses has increased significantly in recent years, partially due to expanded screening. At the same time, the number of people living with HIV and receiving antiretroviral treatment has also increased steadily. In 2003, the government of China began providing free antiretroviral treatment to all persons living with HIV. “Gilead supports China’s efforts to address the HIV epidemic and we are pleased to offer Genvoya as a new treatment option for people living with HIV in China,” said John F. Milligan, PhD, Gilead’s President and Chief Executive Officer. “As part of our TAF-based portfolio of treatments, we believe Genvoya’s safety and efficacy profile may help to address the long-term health needs of China’s HIV patient population.”

Genvoya was studied in a Phase 3 HIV clinical program in more than 3,500 patients across 21 countries, including treatment-naïve, virologically suppressed, renally impaired and adolescent patients. The approval is supported by 144-week data from two Phase 3 double-blind studies (Studies 104 and 111) among 1,733 treatment-naïve patients in which the regimen met the primary endpoint of non-inferiority compared to Gilead’s Stribild® (elvitegravir 150 mg/cobicistat 150 mg/emtricitabine 200 mg/tenofovir disoproxil fumarate 300 mg or E/C/F/TDF) at Week 48. At Week 48, 92.4 percent (n=800/866) of patients taking Genvoya and 90.4 percent (n=784/867) of patients taking Stribild achieved HIV-1 RNA levels less than 50 copies/mL

Additionally, the approval is supported by a Phase 3 study (Study 109) evaluating Genvoya among virologically suppressed patients who switched from TDF-based regimens. The study enrolled 1,436 subjects and 1,196 had reached the 48-week time point at the time of filing. Among those patients, Genvoya was found to be statistically non-inferior to the TDF-based regimens based on the percentages of patients with HIV-1

RNA levels less than 50 copies/mL at Week 48. Patients receiving Genvoya also demonstrated improvements in certain bone and renal laboratory parameters compared to those treated with the TDF-based regimens. Finally, data from Phase 3 studies evaluating Genvoya among adolescents and adults with mild-to-moderate renal impairment supported the approval.

Genvoya does not cure HIV infection or AIDS.

IMPORTANT SAFETY INFORMATION AND INDICATION FOR GENVOYA IN U.S.

BOXED WARNING: POST TREATMENT ACUTE EXACERBATION OF HEPATITIS B

- **Severe acute exacerbations of hepatitis B have been reported in patients who are coinfecting with HIV-1 and HBV and have discontinued products containing emtricitabine (FTC) and/or tenofovir disoproxil fumarate (TDF), and may occur with discontinuation of Genvoya. Hepatic function should be monitored closely with both clinical and laboratory follow-up for at least several months in patients who are coinfecting with HIV-1 and HBV and discontinue Genvoya. If appropriate, anti-hepatitis B therapy may be warranted.**

Contraindications

- **Coadministration:** Do not use with drugs highly dependent on CYP3A for clearance and for which elevated plasma concentrations are associated with serious and/or life-threatening events. Do not use with drugs that strongly induce CYP3A as this may lead to loss of efficacy and possible resistance to Genvoya. Do not use with alfuzosin, carbamazepine, phenobarbital, phenytoin, rifampin, lurasidone, pimozide, dihydroergotamine, ergotamine, methylergonovine, cisapride, lovastatin, simvastatin, sildenafil for pulmonary arterial hypertension, triazolam, oral midazolam, or St. John's wort.

Warnings and precautions

- **Drug interactions:** See Contraindications and Drug Interactions sections. Consider the potential for drug interactions prior to and during Genvoya therapy and monitor for adverse reactions.
- **Immune reconstitution syndrome,** including the occurrence of autoimmune disorders with variable time to onset, has been reported.
- **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 Genvoya, there have been no cases of Fanconi syndrome or proximal renal tubulopathy (PRT). Do not initiate Genvoya in patients with estimated creatinine clearance (CrCl) <30 mL/min. Patients with impaired renal function and/or taking nephrotoxic agents (including NSAIDs) are at increased risk of renal-related adverse reactions. Discontinue Genvoya in patients who develop clinically significant decreases in renal function or evidence of Fanconi syndrome.

Renal monitoring: Prior to or when initiating Genvoya and during therapy, assess serum creatinine, CrCl, urine glucose, and urine protein in all patients on a clinically appropriate schedule. In patients with chronic kidney disease, also assess serum phosphorus. If serum creatinine increases >0.4 mg/dL from baseline, closely monitor for renal safety.

- **Lactic acidosis and severe hepatomegaly with steatosis:** Fatal cases have been reported with the use of nucleoside analogs, including FTC and TDF. Discontinue Genvoya 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

- **Common adverse reactions** (incidence \geq 5%; all grades) in clinical studies were nausea (11%), diarrhea (7%), headache (6%), and fatigue (5%).
- **Drug interactions**
- **Prescribing information:** Consult the full prescribing information for Genvoya for more information on Contraindications, Warnings, and potentially significant drug interactions, including clinical comments.
- **Metabolism:** Genvoya can increase the concentration of drugs metabolized by CYP3A, CYP2D6, P-gp, BCRP, OATP1B1, or OATP1B3. Drugs that inhibit CYP3A, P-gp, or BCRP can increase the concentrations of components of Genvoya. Drugs that induce CYP3A or P-gp can decrease the concentrations of components of Genvoya.
- **Drugs affecting renal function:** Coadministration of Genvoya with drugs that reduce renal function or compete for active tubular secretion may increase concentrations of FTC and tenofovir and the risk of adverse reactions.

Dosage and administration

- **Dosage:** Patients 12 years and older who weigh \geq 35 kg: 1 tablet taken orally once daily with food.
- **Renal impairment:** Not recommended in patients with CrCl <30 mL/min.
- **Hepatic impairment:** Not recommended in patients with severe hepatic impairment.
 - **Prior to or when initiating:** Test patients for HBV infection.
 - **Prior to or when initiating, and during treatment:** On a clinically appropriate schedule, assess serum creatinine, CrCl, urine glucose, and urine protein in all patients. In patients with chronic kidney disease, assess serum phosphorus.

Pregnancy and Lactation

- **Pregnancy:** There is insufficient human data on the use of Genvoya during pregnancy. An Antiretroviral Pregnancy Registry (APR) has been established. Available data from the APR for FTC shows no difference in the rates of birth defects compared with a US reference population.
- **Lactation:** Women infected with HIV-1 should be instructed not to breastfeed, due to the potential for HIV-1 transmission.

Genvoya is indicated in the United States as a complete regimen for the treatment of HIV-1 infection in adults and pediatric patients weighing at least 25 kg who have no antiretroviral (ARV) treatment history or to replace the current ARV regimen in patients who are virologically-suppressed (HIV-1 RNA <50 copies/mL) on a stable ARV regimen for \geq 6 months with no history of treatment failure and no known resistance to any component of Genvoya.

About Gilead Sciences

Gilead Sciences, Inc. is a research-based biopharmaceutical company that discovers, develops and commercializes innovative medicines in areas of unmet medical need. The company strives to transform and simplify care for people with life-threatening illnesses around the world. 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 risk that physicians may not see the benefits of prescribing Genvoya. 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 March 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, including **BOXED WARNING**, for Genvoya is available at www.gilead.com.*

Genvoya and Stribild are registered trademarks of Gilead Sciences, Inc., or its related companies.

For more information on Gilead Sciences, please visit the company's China website at www.gileadchina.com, or follow Gilead on WeChat by scanning the QR code below:

