August 09, 2019

China National Medical Products Administration Approves Biktarvy® (Bictegravir, Emtricitabine and Tenofovir Alafenamide) for Treatment of HIV-1 Infection

-- Biktarvy demonstrated high efficacy and a high barrier to resistance in clinical trials through 48 weeks --

FOSTER CITY, Calif.--(BUSINESS WIRE)--Aug. 9, 2019-- Gilead Sciences, Inc. (NASDAQ: GILD) announced today that the China National Medical Products Administration (NMPA) has approved Biktarvy® (bictegravir 50mg/emtricitabine 200mg/tenofovir alafenamide 25mg, BIC/FTC/TAF), a once-daily single tablet regimen (STR) for the treatment of HIV-1 infection. Biktarvy combines the novel, unboosted integrase strand transfer inhibitor (INSTI) bictegravir with the demonstrated safety and efficacy profile of the Descovy® (emtricitabine 200mg/tenofovir alafenamide 25mg; FTC/TAF) dual nucleoside reverse transcriptase inhibitor (NRTI) backbone and is the smallest INSTI-based triple-therapy STR available. In China, Biktarvy is indicated for the treatment of HIV-1 infection in adults without present or past evidence of viral resistance to the integrase inhibitor class, emtricitabine or tenofovir.

“Biktarvy offers high rates of efficacy, high barriers to resistance and a demonstrated tolerability profile, underscoring its role as an important new treatment option for a broad range of patients in China,” said Professor Taisheng Li, Director of Infectious Disease Department, Peking Union Medical College Hospital.

In 2018, there were approximately 150,000 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. The government of China has provided free antiretroviral treatment to all persons living with HIV since 2003.

The approval of Biktarvy is supported by data from four ongoing Phase 3 studies: Studies 1489 and 1490 in treatment-naïve HIV-1 infected adults, and Studies 1844 and 1878 in virologically suppressed adults. The trials are comprised of a diverse population of 2,414 participants on Biktarvy or an active comparator regimen, including a wide range of adult age groups and races/ethnicities. Biktarvy met its primary efficacy objective of non-inferiority at 48 weeks across all four studies. Through 48 weeks, no participants in any of the four studies developed treatment-emergent virologic resistance while taking Biktarvy, and no patients discontinued Biktarvy due to renal, bone or hepaticadverse events. The most common adverse reactions in patients taking Biktarvy through 48 weeks were diarrhea, nausea and headache.

In the United States, Biktarvy has a Boxed Warning in its product label regarding the risk of post-treatment acute exacerbation of hepatitis B. See below for U.S. Important Safety Information and Indication.

“Gilead is pleased that people living with HIV in China will now have our newest HIV treatment innovation as a treatment option,” said Diana Brainard, MD, Senior Vice President, HIV and Emerging Viruses, Gilead Sciences. “The approval of Biktarvy in China represents a meaningful new option for HIV treatment and the speed with which it has been approved is a testament to China’s commitment to bringing the latest innovations to people with urgent medical need.”

Biktarvy received marketing approval from the U.S. Food and Drug Administration (FDA) and the European Commission in 2018.

Biktarvy does not cure HIV infection or AIDS.

IMPORTANT U.S. SAFETY INFORMATION AND INDICATION FOR BIKTARVY

BOXED WARNING: POST TREATMENT ACUTE EXACERBATION OF HEPATITIS B

- **Severe acute exacerbations of hepatitis B have been reported in patients who are coinfected with HIV-1 and HBV and have discontinued products containing emtricitabine (FTC) and/or tenofovir disoproxil fumarate**

(TDF), and may occur with discontinuation of Biktarvy. Closely monitor hepatic function with both clinical and laboratory follow-up for at least several months in patients who are coinfected with HIV-1 and HBV and discontinue Biktarvy. If appropriate, anti-hepatitis B therapy may be warranted.

Contraindications

- **Coadministration:** Do not use Biktarvy with dofetilide or rifampin.

Warnings and precautions

- **Drug interactions:** See Contraindications and Drug Interactions sections. Consider the potential for drug interactions prior to and during Biktarvy 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 Biktarvy, there have been no cases of Fanconi syndrome or proximal renal tubulopathy (PRT). Do not initiate Biktarvy 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 Biktarvy in patients who develop clinically significant decreases in renal function or evidence of Fanconi syndrome.

  Renal monitoring: Prior to or when initiating Biktarvy and during therapy, assess serum creatinine, CrCl, urine glucose, and urine protein in all patients as clinically appropriate. In patients with chronic kidney disease, also assess serum phosphorus.
- **Lactic acidosis and severe hepatomegaly with steatosis:** Fatal cases have been reported with the use of nucleoside analogs, including FTC and TDF. Discontinue Biktarvy 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) in clinical studies through 96 weeks were diarrhea (6%), nausea (6%), and headache (5%).

Drug interactions

- **Prescribing information:** Consult the full prescribing information for Biktarvy for more information on Contraindications, Warnings, and potentially significant drug interactions, including clinical comments.
- **Enzymes/transporters:** Drugs that induce P-gp or induce both CYP3A and UGT1A1 can substantially decrease the concentration of components of Biktarvy. Drugs that inhibit P-gp, BCRP, or inhibit both CYP3A and UGT1A1 may significantly increase the concentrations of components of Biktarvy. Biktarvy can increase the concentration of drugs that are substrates of OCT2 or MATE1.
- **Drugs affecting renal function:** Coadministration of Biktarvy 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.

Pregnancy and lactation

- **Pregnancy:** There is insufficient human data on the use of Biktarvy during pregnancy. Dolutegravir, another integrase inhibitor, has been associated with neural tube defects. Discuss the benefits and risks of using Biktarvy during pregnancy and conception. 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.

Dosage and administration

- **Dosage:** 1 tablet taken once daily with or without 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:** As clinically appropriate, assess serum creatinine, CrCl, urine glucose, and urine protein in all patients. In patients with chronic kidney disease, assess serum phosphorus.

U.S. INDICATION

Biktarvy is indicated in the U.S. 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 those who are virologically suppressed (HIV-1 RNA <50 copies per mL) on a stable ARV regimen with no history of treatment failure and no known resistance to any component of Biktarvy.

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.

For nearly 30 years, Gilead has been a leading innovator in the field of HIV, driving advances in treatment, prevention, testing and linkage to care, and cure research. Today, it's estimated that more than 12 million people living with HIV globally receive antiretroviral therapy provided by Gilead or one of the company's manufacturing partners.

For more information on Gilead Sciences, please visit the company's website at www.gileadchina.cn.