



## Data Comparing Viread(R) and Emtriva(R) to Combivir(R) as Part of Combination HIV Therapy Published in New England Journal of Medicine

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FOSTER CITY, Calif.--(BUSINESS WIRE)--Jan. 18, 2006-- Publication Describes Superior Viral Suppression with Fewer Adverse Events Leading to Discontinuation for Patients Taking Viread and Emtriva at 48 Weeks

Gilead Sciences, Inc. (Nasdaq:GILD) today announced the publication of 48-week data from a clinical trial (Study 934) comparing a once-daily treatment regimen of Viread(R) (tenofovir disoproxil fumarate), Emtriva(R) (emtricitabine) and Sustiva(R) (efavirenz) to a twice-daily regimen of Combivir(R) (lamivudine/zidovudine) with Sustiva once daily in treatment-naive patients with HIV. Data appearing in the January 19 issue of New England Journal of Medicine (N Engl J Med 2006; 354;3, 251-260) show that a significantly greater percentage of patients taking a regimen containing Viread and Emtriva achieved and maintained HIV RNA less than 400 copies/mL, with fewer side effects that resulted in study discontinuation, and had a greater increase in CD4 cell counts compared to patients taking a Combivir-based regimen.

Viread and Emtriva are often prescribed together as a fixed-dose combination tablet called Truvada(R) (emtricitabine and tenofovir disoproxil fumarate), which became commercially available after Study 934 began. Both Truvada and Combivir are widely used fixed-dose combination medicines from the nucleoside reverse transcriptase inhibitor (NRTI) class of antiretrovirals. NRTIs are commonly regarded as the "backbone" of combination therapy for HIV.

"Data like these are important to help define ways for physicians to simplify effective HIV therapy for treatment-naive patients," said Joel Gallant, MD, Johns Hopkins University School of Medicine, Baltimore, a lead investigator for the study and lead author of the paper. "Even with the remarkable advances made in the field of HIV medicine in the last 10 years, there is still a need for improved and simplified therapy."

### About Study 934

Study 934 is a Phase III, multicenter, open-label clinical trial that enrolled 517 HIV-infected patients in the United States and Europe. The study's primary endpoint was at 48 weeks. The prespecified primary efficacy population included 487 patients. Participants in one arm of the study received Viread 300 mg, Emtriva 200 mg and Sustiva 600 mg, all dosed once daily. Patients in the comparator arm received Combivir twice daily and Sustiva 600 mg once daily. At study entry, patients had not previously received antiretroviral therapy and had HIV RNA (viral load) greater than 10,000 copies/mL. The study is planned to continue through 144 weeks.

For the 48 week (n=487) primary endpoint of the study, 84 percent of patients in the Viread/Emtriva arm compared to 73 percent of patients in the Combivir arm achieved and maintained HIV RNA less than 400 copies/mL through week 48 using the Time to Loss of Virologic Response algorithm (TLOVR) ( $p=0.002$ ; 95% CI, +4% to +19%). Similarly, 80 percent of patients in the Viread/Emtriva arm compared to 70 percent of patients in the Combivir arm achieved and maintained HIV RNA less than 50 copies/mL through week 48 using the TLOVR algorithm ( $p=0.02$ ; 95% CI, +2% to +17%). Patients receiving Viread/Emtriva had a significantly greater increase from baseline in CD4 cell counts at week 48 compared to those receiving Combivir (190 vs. 158 cells/mm<sup>3</sup>;  $p=0.002$ ; 95% CI, +9 cells/mm<sup>3</sup> to +55 cells/mm<sup>3</sup>).

Genotypic data were collected for 35 patients with HIV that met the criteria for resistance analyses. Resistance analysis included patients who had HIV RNA greater than 400 copies/mL either at week 48, or for two consecutive visits after having achieved viral suppression below 400 copies on at least one occasion, or who discontinued prior to week 48 but had HIV RNA greater than 400 copies mL on their last visit prior to discontinuation. Twenty-two patients with baseline NNRTI resistance were excluded from the analysis. There were no significant differences between the two treatment groups, and the most common resistance mutations that developed were associated with Sustiva. No patient developed the K65R mutation, which is associated with resistance to Viread.

The 48-week safety analysis for Study 934 is based on 511 patients who received any study medication. A significantly ( $p=0.02$ ) greater percentage of patients in the Combivir group (9 percent) experienced adverse events that resulted in the discontinuation of study medications compared to the Viread/Emtriva arm (4 percent). The most common cause of discontinuation related to study drug for patients in the Combivir arm was anemia (14 patients, vs. 0 in the Viread/Emtriva arm;  $p$  less than 0.001) and in the Viread/Emtriva arm was NNRTI-associated rash, which occurred in 2 patients. Renal safety was similar in the two groups and no patient discontinued study medication due to renal events.

A significantly ( $p$  less than 0.001) greater percentage of patients in the Viread/Emtriva arm of the study had a lower mean increase from baseline in fasting total cholesterol levels (21 mg/dL) compared to patients in the Combivir arm (35 mg/dL). At week 48, total limb fat was significantly less in a subset of patients receiving Combivir (mean of 6.9 kg or 15.2 pounds; n=49) compared to a subset of patients receiving Viread and Emtriva (mean of 8.9 kg or 19.6 pounds; n=51;  $p=0.03$ ).

Data from Study 934 have not been reviewed by the U.S. Food and Drug Administration (FDA). It is important that patients be aware that individual HIV medications must be taken as part of combination regimens, and that they do not cure HIV infection or prevent transmitting HIV to other people.

### Joint Venture to Develop Fixed-Dose Regimen of Truvada and Sustiva

On December 20, 2004, Gilead and Bristol-Myers Squibb (BMS) announced the establishment of a U.S. joint venture to develop and commercialize a once-daily fixed-dose combination of Truvada and Sustiva. Gilead and BMS announced on January 9, 2006 that the companies have obtained data supporting bioequivalence of a new formulation of the fixed-dose combination with the components that make up the combination and expect to file a new drug application with the FDA in the second quarter of this year.

### About HIV/AIDS

2006 marks the 25th anniversary of the start of the AIDS epidemic. The first cases of HIV/AIDS were reported by the U.S. Centers for Disease Control and Prevention (CDC) in the June 5, 1981 issue of the Morbidity and Mortality Weekly Report (MMWR). Today, CDC estimates that more than one

million Americans are infected with HIV, the virus that causes acquired immunodeficiency syndrome (AIDS). Of these, approximately 25 percent are unaware of their infection. Although HIV treatment options have expanded rapidly in recent years, CDC estimates that 216,000 Americans who are HIV infected and eligible for antiretroviral treatment are currently not receiving it.

#### Ensuring Access in Developing World Countries

The parent compound of Viread was discovered through a collaborative research effort between Dr. Antonin Holý, Institute for Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic (IOCB) in Prague and Dr. Erik DeClercq, Rega Institute for Medical Research, Katholieke Universiteit Leuven, Belgium. The inventors have agreed to waive their right to a royalty on sales of products containing tenofovir in the 97 developing countries served by the Gilead Access Program to ensure the product can be offered at a no-profit price in parts of the world where the AIDS epidemic has hit the hardest.

#### Important Safety Information from U.S. Prescribing Information for Truvada, Emtriva and Viread

Lactic acidosis and severe hepatomegaly with steatosis, including fatal cases, have been reported with the use of nucleoside analogues alone or in combination with other antiretrovirals. Truvada, Emtriva and Viread are not indicated for the treatment of chronic hepatitis B virus (HBV) infection and the safety and efficacy of these drugs has not been established in patients co-infected with HBV and HIV. Severe acute exacerbations of hepatitis B have been reported in patients who have discontinued Emtriva or Viread. Hepatic function should be monitored closely with both clinical and laboratory follow-up for at least several months in patients who discontinue Truvada, Emtriva or Viread and are co-infected with HIV and HBV. If appropriate, initiation of anti-hepatitis B therapy may be warranted.

Changes in body fat have been observed in patients taking Truvada, Emtriva and Viread and other anti-HIV medicines. The cause and long term health effect of this condition is unknown. Immune reconstitution syndrome has been reported in patients treated with combination antiretroviral therapy, including Truvada, Emtriva and Viread.

#### About Truvada

Truvada is a fixed-dose combination of Emtriva and Viread. Truvada combines 200 mg of emtricitabine and 300 mg of tenofovir disoproxil fumarate in one tablet, taken once a day in combination with other antiretroviral agents. In the United States, Truvada is indicated in combination with other antiretroviral agents (such as non-nucleoside reverse transcriptase inhibitors or protease inhibitors) for the treatment of HIV-1 infection in adults. Safety and efficacy studies using Truvada tablets or using Emtriva and Viread in combination are ongoing.

Emtriva and Viread have each been studied as part of multi-drug regimens and have been found to be safe and effective. In clinical study 303 Emtriva and lamivudine (3TC) demonstrated comparable efficacy, safety and resistance patterns as part of multidrug regimens. These data, and those from study 903, in which lamivudine and tenofovir were used in combination, support the use of Truvada for the treatment of HIV-1 infection in treatment-naïve adults. In treatment-experienced patients, the use of Truvada should be guided by laboratory testing and treatment history.

There are no study results demonstrating the effect of Truvada on clinical progression of HIV-1, and it is not recommended that Truvada be used as a component of a triple nucleoside regimen. Truvada should not be used with Emtriva or Viread, or other drugs containing lamivudine, including Combivir, Epivir(R), Epivir-HBV(R), Epzicom(TM) or Trizivir(R). No drug interaction studies have been conducted using Truvada. Drug interactions have been observed when didanosine, atazanavir, or lopinavir/ritonavir are co-administered with Viread, a component of Truvada, and dose adjustments may be necessary. Data are not available to recommend a dose adjustment of didanosine for patients weighing less than 60 kg. Patients on atazanavir or lopinavir/ritonavir plus Truvada should be monitored for Truvada-associated adverse events that may require discontinuation. When co-administered with Viread, it is recommended that atazanavir 300 mg be given with ritonavir 100 mg. Atazanavir without ritonavir should not be co-administered with Viread.

Two-hundred eighty-three patients have received combination therapy with Emtriva and Viread with either a non-nucleoside reverse transcriptase inhibitor or protease inhibitor for 24 to 48 weeks in ongoing clinical studies. Based on these limited data, no new patterns of adverse events were identified and there was no increased frequency of established toxicities. For additional safety information about Emtriva or Viread in combination with other antiretroviral agents, please see "About Emtriva" and "About Viread," below.

#### About Emtriva

In the United States, Emtriva is indicated, in combination with other antiretroviral agents, for the treatment of HIV-1 infection in patients over three months of age. This indication is based on analyses of plasma HIV-1 RNA levels and CD4 cell counts from controlled studies of 48 weeks duration in antiretroviral-naïve patients and antiretroviral-treatment-experienced patients who were virologically suppressed on an HIV treatment regimen. In antiretroviral-treatment-experienced patients, the use of Emtriva may be considered for patients with HIV strains that are expected to be susceptible to Emtriva as assessed by genotypic or phenotypic testing.

Adverse events that occurred in more than 5 percent of patients receiving Emtriva with other antiretroviral agents in clinical trials include abdominal pain, asthenia (weakness), headache, diarrhea, nausea, vomiting, dizziness and rash (rash, pruritis, maculopapular rash, urticaria, vesiculobullous rash, pustular rash and allergic reaction). Approximately 1 percent of patients discontinued participation because of these events. All adverse events were reported with similar frequency in Emtriva and control treatment groups with the exception of skin discoloration, which was reported with higher frequency in the Emtriva treated group. Skin discoloration, manifested by hyperpigmentation on the palms and/or soles, was generally mild and asymptomatic. The mechanism and clinical significance are unknown. For pediatric patients over three months of age, the adverse event profile observed during clinical trials was similar to that of adult patients, with the exception of anemia and a higher frequency of hyperpigmentation.

#### About Viread

In the United States, Viread is indicated in combination with other antiretroviral agents for the treatment of HIV-1 infection. This indication is based on analyses of plasma HIV-1 RNA levels and CD4 cell counts in controlled studies of Viread in treatment-naïve adults and in treatment-experienced adults. There are no study results demonstrating the effect of Viread on clinical progression of HIV-1. The use of Viread should be considered for treating adult patients with HIV-1 strains that are expected to be susceptible to tenofovir as assessed by laboratory testing or treatment history.

Renal impairment, including cases of acute renal failure and Fanconi syndrome (renal tubular injury with severe hypophosphatemia), has been reported. Renal impairment occurred most often in patients with underlying systemic or renal disease or in patients taking concomitant nephrotoxic

agents, though some cases have appeared in patients without identified risk factors. Decreases in bone mineral density (BMD) at the lumbar spine and hip have been seen with the use of Viread. The clinical significance of changes in BMD and biochemical markers is unknown and follow-up is continuing to assess long-term impact. The most common adverse events and those occurring in more than 5 percent of patients receiving Viread with other antiretroviral agents in clinical trials include asthenia, pain, abdominal pain, headache, nausea, diarrhea, vomiting, rash (rash, pruritis, maculopapular rash, urticaria, vesiculobullous rash and pustular rash), flatulence, dizziness and depression. Less than 1 percent of patients discontinued participation because of gastrointestinal events.

#### 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 worldwide. Headquartered in Foster City, California, Gilead has operations in North America, Europe and Australia.

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 the safety and efficacy data obtained through 48 weeks of Study 934 will not be observed in other studies or clinical practice and risks associated with the inclusion of these data in the labels for Truvada or Viread. These risks and uncertainties could cause actual results to differ materially from those referred to in the forward-looking statements. Risks are described in detail in the Gilead Annual Report on Form 10-K for the year ended December 31, 2004 and in Gilead's Quarterly Reports on Form 10-Q, all of which are on file 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 full prescribing information, please visit [www.Truvada.com](http://www.Truvada.com), [www.Viread.com](http://www.Viread.com) and [www.Emtriva.com](http://www.Emtriva.com).

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For more information on Gilead Sciences, please visit the company's website at [www.gilead.com](http://www.gilead.com) or call Gilead Public Affairs at 1-800-GILEAD-5 or 1-650-574-3000.

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