

## **Emtricitabine/Tenofovir Disoproxil Fumarate**

### **A Viewpoint by Daniel Podzamczar**

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Highly active antiretroviral therapy (HAART) has proved to be very effective against HIV. However, drug potency, tolerability and adherence issues need further attention if viral suppression is to be maintained long term and HIV converted into a true chronic infection. Although treatment compliance is a complex issue related to patients' social and psychological characteristics, optimising the simplicity of regimens will improve treatment convenience and, therefore, adherence.

As has been shown with other diseases such as tuberculosis, fixed-dose drug combinations may help to improve adherence to therapy in HIV-infected patients. This has been nicely observed with zidovudine/lamivudine and zidovudine/lamivudine/abacavir fixed-dose combinations. In this context, the new co-formulation of the two nucleotide/nucleoside analogues, tenofovir disoproxil fumarate (te-

nofovir DF) and emtricitabine, is good news. Both compounds are potent and well tolerated, and have proven efficacy as part of different HAART regimens in clinical trials. In addition, as both drugs are given as a daily single pill, they allow a simple HAART regimen to be administered.

Recent data have shown that unexpected drug interactions or other factors such as a low genetic barrier may reduce the efficacy or increase the toxicity of some drug combinations. However, available pharmacokinetic data, as well as results from a few trials, suggest that tenofovir DF and emtricitabine may be safely and effectively used in the same regimen. In addition, bioequivalence between the fixed combination and the two separate agents has recently been demonstrated.

Large clinical trials and wider use in clinical practice are needed to confirm the benefits of this combination. In this setting, the fixed-dose combination will reduce the number of pills needed and improve treatment adherence, thus reducing the risk of drug resistance and contributing to long-term virological and clinical success. ▲