Journal of the International AIDS Society

Poster presentation

Substitution of tenofovir for nucleoside analogues in virologically controlled HIV-infected patients co-infected with hepatitis C virus: TEN-SWITCH

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from Ninth International Congress on Drug Therapy in HIV Infection
Glasgow, UK. 9–13 November 2008

Published: 10 November 2008

Journal of the International AIDS Society 2008, **11**(Suppl 1):P277 doi:10.1186/1758-2652-11-S1-P277

This abstract is available from: http://www.jiasociety.org/content/11/S1/P277

Background

Treatment of hepatitis C virus (HCV) in HCV/HIV co-infected patients requires the simultaneous management of two complex regimens, including addressing potential drug interactions between HCV and HIV medications.

Methods

TEN-SWITCH is a prospective, observational study to evaluate the impact of substituting tenofovir (TDF) for other nucleoside analogues in virologically controlled HIV-infected patients (HIV RNA <400 copies/mL) on maintenance of virologic suppression and immune status in HCV/HIV co-infected subjects. Adverse events and HCV treatment uptake following a switch to TDF were also evaluated.

Summary of results

Among 23 subjects enrolled (mean age 45 years, 83% male), 44% were HCV genotype 3, 65% were receiving methadone and 87% reported a history of illicit and injection drug use. The median number of previous NRTIs, NNRTIs and PIs were 2 (range: 0–4), 1 (range: 0–2) and 0 (range: 0–4), respectively. Prior to switch, subjects received PI- (n = 18, LPV/RTV = 9, IDV/RTV = 1, SQV/RTV = 1, ATV/RTV = 2, ATV = 4) or NNRTI-based (n = 5, EFV = 2, NVP = 3, DLV = 1) HAART in combination with either 3TC/DDI (n = 14), ABC/DDI (n = 2), FTC/DDI (n = 1), 3TC/d4T (n = 4), 3TC/AZT (n = 1) or ABC/AZT (n = 1). Median baseline CD4+ count and HIV RNA were 350 (range: 40–999) cells/mm^3 and <50 (range: 0–75) copies/mL. Overall, 100% and 91% had HIV-RNA <400 copies/mL and <50 copies/mL, respectively. Among the 18 subjects having completed 12 months of follow-up, two subjects (11%) discontinued TDF following a switch (one due to adverse events, nausea and vomiting likely associated with addition of RTV to unboosted ATV regimen; one due to non-adherence). Two other adverse events that did not require therapy discontinuation were observed (one – vertigo, one – nausea with the addition of RTV). At 12 months of follow-up, the median CD4+ count and HIV-RNA were 530 (range: 180–999) cells/mm^3 and <50 (range: 0–82) copies/mL. At 12 months (intent to treat), 89% and 83% had HIV-RNA <400 copies/mL and <50 copies/mL, respectively. Of 18 subjects, three (17%) initiated treatment for HCV infection.

Conclusion

Switching nucleosides in an effective HAART regimen to TDF in preparation for HCV treatment to address potential ribavirin/nucleoside interactions is a safe intervention

not associated with loss of virologic or immunologic efficacy of the regimen.