



8th International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV

San Francisco, California - September 24 - 26, 2006

PREDICTORS OF CREATININE (CR) INCREASE AND DRUG DISCONTINUATION IN A PROVINCE-WIDE COHORT OF PATIENTS RECEIVING TENOFOVIR DF (TDF)

Antiviral Therapy 2006; 11:L12 (abstract no. 17)

M Harris¹, R Joy², N Zalunardo³, R Werb³, B Yip², R Hogg² and J Montaner²

¹AIDS Research Program, St. Paul's Hospital, Vancouver, BC, Canada; ²British Columbia Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada; ³Division of Nephrology, University of British Columbia, Vancouver, BC, Canada

BACKGROUND: Analysis of the TDF EAP demonstrated TDF was associated with clinically significant increases in Cr, occurring earlier in patients with lower CD4 counts. Since approval in Canada in January 2003, TDF is used in a wider spectrum of patients, without restrictions on ARV experience, baseline CD4, renal function or concomitant medications. We examined factors associated with Cr increase and TDF discontinuations using a provincial database incorporating demographics, ARV treatment history, and laboratory parameters.

METHODS: HIV+ adults starting TDF between January 1, 2003 and May 31, 2005 were included, if results were available for ≥ 1 Cr within 6 months of starting TDF and ≥ 1 Cr after starting and while still on TDF. Endpoints were Cr increase to $\geq 1.3 \times$ pre-TDF baseline or TDF discontinuation for any reason. Logistic regression was used to calculate unadjusted and adjusted odds ratios (OR) and 95% confidence intervals (CI). Event-free subjects were right censored at the last Cr test up to October 31, 2005.

RESULTS: The analysis includes 1182 patients: 1000 male (85%), 188 ARV naïve (16%), and 265 with AIDS (22%). Median age at TDF start was 42 years, previous ARV exposure 34 months, CD4 220 cells/mm³, VL 24,500 copies/ml, Cr 83 μ mol/l, GFR 92 ml/min/1.73m². Concomitant ARV included ddi in 406 (34%) and boosted PIs in 967 (82%). Median time on TDF was 12.2 months. Five percent (62/826) developed Cr $\geq 1.3 \times$ baseline and 20% (236/1182) discontinued TDF for any reason, including 66 (6%) that died. In multivariate analysis, factors associated with Cr $\geq 1.3 \times$ baseline were concomitant ddi (OR 2.14; CI 1.16, 3.95; $P=0.015$), baseline CD4 (OR 1.59/ 100 cell decrement; CI

1.27, 2.04; $P < 0.0001$), and female gender (OR 2.33; CI 1.10, 5.00; $P = 0.029$). Factors associated with TDF discontinuation were concomitant ddi (OR 2.21; CI 1.63, 3.02; $P < 0.0001$), baseline CD4 (OR 1.22/100 cell decrement; CI 1.11, 1.34; $P < 0.0001$), and previous ARV exposure (OR 0.89/12 months; CI 0.84, 0.94; $P < 0.0001$).

CONCLUSIONS: Among patients taking TDF, Cr elevation and TDF discontinuation are associated with concomitant use of ddi but not boosted PIs. Cr increases and TDF discontinuation are also associated with more advanced HIV disease, as previously demonstrated.

2006-09-24
17

Copyright © 2006 - [International Medical Press Ltd.](#) Reproduction of this abstract (other than one copy for personal reference) must be cleared through the International Medical Press Ltd. 2-4 Idol Lane, London EC3R 5DD UK.