Conclusion. TAMR exposures increase with increasing severity of HI. The increase in TAMR exposures in patients with mild or moderate HI is not expected to alter the safety profile of FTR. The risk/benefit of higher TAMR exposures in severe HI is under evaluation.


1391. Efavirenz-metabolizing polymorphisms, viral suppression, and depression in HIV-infected individuals initiating antiretroviral therapy in southwestern South Africa

Friday, October 6, 2017: 12:30 PM

Methods. We evaluated three SNPs in CY2B26 (rs7345274, rs2839949, and rs4803419, Illumina OmniExpress) among HIV-infected Ugandans observed in a cohort study every 3–4 months from 2005–2015. Genotypes from these SNPs were used to group participants into previously described pharmacokinetic strata: extensive (EXT), intermediate (INT), and slow metabolizers (Figure 1). The primary outcomes were viral suppression, defined by an undetectable viral load in the first measurement a minimum of three months after ART initiation, and incident depression in the first two years, defined by a mean score ≥1.75 on the Hopkins Symptom Checklist. We fitted standard and generalized estimating equations (GEE) logistic regression models for viral suppression and depression, respectively. Models were adjusted for clinical and demographic covariates that reached a significance of P < 0.25 in unadjusted models.

Results. Among 103 participants with genotyping, there were no differences in pre-ART viral load or depression by metabolism strata (P = 0.5). Minor allele frequencies for rs3745274, rs2839949, and rs4803419 were 33%, 7%, and 4%, respectively. Approximately 79%, 78%, and 94% of participants were suppressed at their first viral load measurement in the extensive, intermediate, and slow metabolizer strata, respectively (Figure 2; P = 0.35). In adjusted models, metabolism strata were not associated with viral suppression (AOR0.81, 95% CI 0.26–2.56; AOR0.39–39.40) or with depression (AOR1.95, 95% CI 0.75–5.09; AOR0.72, 95% CI 0.17–3.02; Table).

Conclusion. We did not identify an association between efavirenz-metabolizing polymorphisms and viral suppression or depression in a cohort of HIV-infected adults initiating ART in southwestern Uganda. Future work should reassess these relationships with larger samples and longer-term outcomes and explore additional polymorphisms that may be associated with efavirenz metabolism in this population.

Figure 1.
Methods. A retrospective chart review of HIV-infected patients, 18 years or older, seen at our clinic between August 2013 and December 2015 who were on DRV/DTG combination alone or with additional active agents was conducted. Demographic, clinical, and laboratory information was collected. Descriptive statistics were used for data analysis.

Results. Eighty-seven patients were included in the study: 64 (74%) on DRV/DTG alone and 23 (26%) on DRV/DTG plus additional agents. Mean age was 49.3 (18–79); 29 (33.3%) were female; and 77 (89%) were black. Coronary artery disease (CAD) or CAD equivalent was present in 27 (31%), chronic kidney disease in 24 (28%), and chronic hepatitis B infection in 3 (3%) patients. The majority 86 (99%) of patients were treatment experienced; 60 (69%) had been treated with 3 or more antiretroviral drug classes; 57 (66%) were integratee experienced, including 6 (6.8%) with baseline integrase resistance. Baseline HIV viral load was >200 copies/mL in 41 (47%) and CD4 count was <200 in 29 (33%) patients. Reason for switch was reported as salvage in 42 patients (48%) simplification in 33 patients (38%), renal impairment in 11 patients (13%), and other in 6 patients (7%). VLS was achieved or maintained in 40 of 46 patients (87%) who presented for follow up after 12 months. 25 of 28 (89%) at 3–4 months, 28 (75%) at 4–6 months, and 55 of 61 (90%) at 7–12 months after starting therapy. Six patients were later switched off of DRV/DTG to another combination, of whom only two required switch due to intolerance (rash in 1 and large pill size in 1).

Conclusion. Our preliminary results suggest that darunavir/dolutegravir combination is a viable switch option in HIV patients with the majority of patients achieving or maintaining VLS at 1 year of follow up and only 2 patients required a regimen change due to intolerance.

Disclosures. All authors: No reported disclosures.