Long-term efficacy and safety of atazanavir/ritonavir treatment in a cohort of treatment-naı¨ve HIV patients: an interim analysis of the REMAIN study

Teófilo, E1; Knechten, H2; Antela, A3; Aleixo, M4; Santos, J3; Barlet, M6 and Jimenez-Exposito, M7

1Hospital Dos Capuchos, Department of Internal Medicine, Lisbon, Portugal. 2HIV Schwerpunktpraxis Dr. Heribert Knechten, Aachen, Germany. 3Hospital Clínico Universitario de Santiago, Infectious Disease Service, Santiago de Compostela, Spain. 4Hospital García de Orta, Infectious Diseases Service, Almada, Portugal. 5Hospital Virgen de la Victoria, Infectious Disease Unit, Malaga, Spain. 6Altigapharma, Boulogne-Billancourt, France. 7Bristol-Myers Squibb, Medical Department, Paris, France.

Purpose
Combined antiretroviral therapy has dramatically improved HIV-infected individuals survival. Long-term strategies are currently needed to achieve the goal of durable virologic suppression. However, long-term available data for specific antiretrovirals (ARV) are limited. In clinical trials, boosted atazanavir (ATV/r) regimens has shown good efficacy and tolerability in ARV-naı ¨ve patients for up to 4 years. The REMAIN study aimed to evaluate the long-term outcomes of ATV/r regimens in ARV-naı ¨ve patients in a real life setting.

Methods
Non-comparative, observational study conducted in Germany, Portugal and Spain. Historical and longitudinal follow-up data was extracted six monthly from the medical record of HIV-infected, treatment-naı¨ve patients, who initiated an ATV/r-regimen between 2008 and 2010. The primary endpoint was the proportion of patients remaining on ATV treatment over time. Secondary endpoints included virologic response (HIV-1 RNA <50 c/mL and <500 c/mL), reasons for discontinuation and long-term safety. The duration of treatment and time to virologic failure (VF) were analyzed using the Kaplan-Meier method. Data from an interim analysis including patients with at least one year of follow-up are reported here.

Results
A total of 411 patients were included in this interim analysis [median (Q1, Q3) follow-up: 23.42 (16.25, 32.24) months]: 77% male; median age 40 years [min, max: 19, 78]; 16% IDUs; 18% CDC C; 18% hepatitis C. TDF/FTC was the most common backbone (85%). At baseline, median (Q1, Q3) HIV-RNA and CD4 cell count were 4.91 (4.34, 5.34) log10 c/mL and 256 (139, 353) cells/mm3, respectively. The probability of remaining on treatment was 0.84 (95% CI: 0.80, 0.87) and 0.72 (95% CI: 0.67, 0.76) for the first and second year, respectively. After 2 years of follow-up, 84% (95% CI: 0.79, 0.88) of patients were virologically suppressed (<50 c/mL). No major protease inhibitors mutations were observed at VF. Overall, 125 patients (30%) discontinued ATV therapy [median (Q1, Q3) time to discontinuation: 11.14 (6.24, 19.35) months]. Adverse events (AEs) were the main reason for discontinuation (n = 47, 11%). Hyperbilirubinaemia was the most common AE leading to discontinuation (14 patients). No unexpected AEs were reported.

Conclusions
In a real life clinical setting, ATV/r regimens showed durable virologic efficacy with good tolerability in an ARV-naı ¨ve population. Data from longer follow-up will provide additional valuable information.