

Poster Abstract – P313

## Predictive factors of therapeutic success of a HAART regimen including atazanavir with or without ritonavir in HIV-infected patients

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To evaluate the factors that may influence the persistence and the virological failure of an atazanavir (ATV)-containing antiretroviral regimen. We conducted a retrospective cohort study in HIV-positive patients (pts) who were being followed at the Infectious Diseases Division, University of Milan. Data regarding viral load, CD4 lymphocytes and the blood chemistry parameters were collected at 1st, 3rd, 6th months from the beginning of therapy and then every six months. Factors related to persistence of therapy with ATV and virological failure (HIV-RNA > 50cp/mL after six months) were evaluated with Kaplan-Meier curve, Cox model and logistic regression. 574 pts were evaluated: 480 experienced therapy with ATV with ritonavir (ATV/r) (80 naïve), 218 with unboosted ATV (5 naïve) and 124 with both regimens. At baseline: median age of 43 years (IQR 39–48), CD4+ median count 418 cell/mm<sup>3</sup> (IQR 277–606), VL < 50cp/mL in 370 pts (54.4%), and median duration of infection 12 years (IQR 6–18). The median duration of therapy was 21 months (IQR 7–49) in pts treated with ATV/r and 22 months (IQR 8–44) with unboosted ATV. We observed a borderline significant difference for the persistence of the regimen between the two groups ( $p = 0.05$ ) that disappears after removing the suspensions for simplification. Pts treated with ritonavir (OR = 1.563; 95% CI 1.058–2.308,  $p = 0.025$ ) and with a backbone containing AZT-ddI-d4T (OR = 3.34; 95% CI 1.873–5.956,  $p < 0.001$ ) had an increased risk of therapy suspension, whereas starting therapy with ATV in recent years resulted protective (OR = 0.741; 95% CI 0.678–0.809,  $p < 0.001$ ). The suspension for toxicity was not significantly different between pts treated with ATV/r and unboosted ATV. No significant difference between the two therapies was observed regarding virological failure. Of note, pts with an elevated VL at baseline (OR 1.234; 95% CI 1.065–1.429,  $p = 0.005$ ) and male gender (OR 1.667; 95% CI 1.06–2.621,  $p = 0.027$ ) were at elevated risk of failure, whereas a backbone containing AZT-ddI-d4T (OR 0.356; 95% CI 0.196–0.638,  $p = 0.001$ ) and a recent year of starting ATV (OR 0.64; 95% CI 0.579–0.71,  $p < 0.001$ ) are protective factors. No significant difference between pts treated with ATV/r or unboosted was observed regarding the induction of hyperbilirubinemia of ACTG grade III and IV. Treatment with unboosted ATV can last longer than that with ATV/r without an increased risk of therapeutic failure. A comparable safety profile was seen for pts who received ATV/r or unboosted ATV.

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