JOURNAL OF THE INTERNATIONAL AIDS SOCIETY

POSTER PRESENTATION Open Access

Switch to once or twice daily unboosted atazanavir in a cohort of stable HIV patients: strong differences in drug exposure and virological outcome

T Baudry[1*], A Boibieux[1], MC Gagnieu[2], L Cotte[3], JM Livrozet[4], P Miahles[3], D Makhloufi[4], C Chidiac[1], D Peyramond[1], T Ferry[1]

From Tenth International Congress on Drug Therapy in HIV Infection
Glasgow, UK. 7-11 November 2010

Purpose of the study

Switch to once daily unboosted (u) atazanavir (ATV) is an attractive option for HIV-infected patients with undetectable viral load, due to its convenience and favorable metabolic profile. However, due to a large interindividual variability, increased risk of inadequate ATV plasma concentrations (ATVc) and virological failure (VF) may be observed. Dividing the daily dose in a twice a day (BID) regimen could increase ATVc and improve virological success.

Methods

In a prospective observational cohort of HIV-infected patients, all individuals with undetectable viral load who were switched to uATV during at least one month were retrospectively selected. ATVc were measured by a validated HPLC in all patients at least two weeks after the initiation of ATV. ATVc was considered inadequate when trough concentration was below 0,150 mg/L. Patients with once (400 mg QD) versus twice daily (200 mg BID) uATV were compared.

Summary of results

From 2002 to 2009, 58 patients who received a total of 69 uATV based-regimens (27 QD and 42 BID regimens) were included. At the start of uATV, patients received a median duration of 9 years (IQR 4-11) of antiretroviral therapy. The mean exposure time of uATV was 16 months. Clinical characteristics and comedications (including tenofovir) were similar in the two groups. ATVc was inadequate in 17 (63%) patients in the QD group versus 4 (9%) patients in the BID group ($p<0.001$). During the follow up, VF happened significantly more frequently in the QD group than in the BID group (6 [22%] versus 1 [2%]; $p=0.012$). VF or low ATVc lead to treatment discontinuation in10 (37%) QD regimens versus 4 (9%) BID regimens ($p=0,06$). No other significant differences were detected in the two groups.

Conclusions

Despite possible bias due to the observational study design, strong differences were detected in plasma drug exposure and virological outcome in our study. When a switch to uATV is proposed in HIV-controlled patients, BID would be preferred to QD.

Author details
[1]Hopital de la Croix Rousse, Service de Maladies Infectieuses et Tropicales, Lyon, France. [2]Hopital Edouard Herriot, Laboratoire de Pharmacologie, Lyon, France. [3]Hotel Dieu, Service d'hépato-gastro-entérologie, Lyon, France. [4]Hopital Edouard Herriot, Service d'immunologie clinique, Lyon, France.

Published: 8 November 2010

doi:10.1186/1758-2652-13-S4-P47
Cite this article as: Baudry *et al.*: Switch to once or twice daily unboosted atazanavir in a cohort of stable HIV patients: strong differences in drug exposure and virological outcome. *Journal of the International AIDS Society* 2010 **13**(Suppl 4):P47.

[1]Hopital de la Croix Rousse, Service de Maladies Infectieuses et Tropicales, Lyon, France
Full list of author information is available at the end of the article