Reviewer's report

Title: Predictors of First-Line Antiretroviral Therapy Discontinuation Due to Drug-Related Adverse Events in HIV-Infected Patients: a Retrospective Cohort Study.

Version: 2 Date: 27 August 2012

Reviewer: Nacho Suarez

Reviewer's report:

Major Compulsory Revisions

2. The Cox analysis has compared the combined variable of Nationality non-Italian/unknown vs Italian that can be a bias for mistake. I suggest comparing non-Italian vs. Italian and unknown vs. Italian.

3. The number of patients on drugs such as Sustiva+Truvada seems quite low to be the reference in the comparison for multivariate analysis.

4. The number of patients with Atripla, Reyataz or any other NRTI + PI/r is small simples so I suggest not make the analysis by subgroups.

5. I suggest the authors to consider the analysis into:
   • 2NRTI+PI vs NRTI+NNRTI
   • 2NRTI+PI/r vs NRTI+NNRTI
   • any other or subtype vs NRTI+NNRTI

6. In the document the analysis of HR for individual drugs is not clear which drug is used as a reference.

Minor Essential Revisions
1. I suggest to authors to eliminate from methods the paragraph:
   “This stratification was made in order to analyze the possible role of the introduction in Italy of tenofovir (November 2002), Truvada® (September 2005), and Atripla® (October 2008.” Since the events mentioned have place at the end of the three periods (1999-2002, 2003-2005, 2006-2008)

2. In table 4 the time periods have a mistake, 2004 vs. 2009 and 2010. Should be fixed.

Discretionary Revisions
1. Bibliographic references 15-16 are not necessary to be included.
I hope and wish that all my suggestions and commentaries helping you. Good work and good luck.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests