Reviewer’s report

Title: High frequency of Fredrickson's phenotypes IV and IIb in Brazilians infected by human immunodeficiency virus.

Version: 1 Date: 29 March 2005

Reviewer: Bruno B Caramelli

Reviewer’s report:

General
The study analyzed the lipid profile, according to Fredrickson's phenotypes classification, in brazilian patients with AIDS. Lipid abnormalities in patients with AIDS is now a well known phenomenon. However, a phenotype classification in specific populations exposed to different cardiovascular risk factors prevalences is interesting and can help in the elaboration of risk reduction strategies. However, some important issues must be addressed before acceptance.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. Triglycerides levels must be under 400 mg/dl in order to use Friedwald formula for calculation of LDL-cholesterol values. Authors must declare if this condition was observed. TG levels up to 1512 mg/dl was obtained in the study.
2. Some conditions that could interfere with lipid levels should be investigated like diet regimens, hypothyroidism, renal disease, or diabetes mellitus.
3. I disagree with the authors regarding the atherogenic characteristic of Type IV Fredrickson Phenotype Classification. The evidences in this case are weak. The evidence in favor to the relationship between atherosclerosis and Type IIb is stronger and compelling. Discussion should not consider the two conditions similarly.
4. HDL-cholesterol does not take part of Fredrickson classification data. However, for this specific population the information is important and needs to be considered separately.
5. Reduction of morbidity and mortality was not the purpose of this study. It not possible to conclude, as the authors did, that dyslipidemia must be treated for the aimed reductions. Other risk factors like smoking, inactivity, obesity, etc, must be assessed in order to determine the global cardiovascular risk and determine strategies to reduce it.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. In order to avoid confusion, authors must choose the name Mixed dyslipidemia or combined dyslipidemia. And prefer the expression widely distribution instead of widely combined to describe findings in Table 3.
2. By the way, why choosing extra classification as depicted in Table 3? Readers can become confused between Table 3 and Fredrickson's classes! There is no clinical endpoints (at least at my knowledge) related to Table 3 classes!

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the
major compulsory revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests.