Reviewer's report

**Title:** Heritability of Cardiovascular Risk Factors in a Brazilian Population: Baependi Heart Study

**Version:** 1  **Date:** 10 December 2007

**Reviewer:** Jean W. MacCluer

**Reviewer's report:**

The goal of this study was to evaluate genetic and environmental effects on risk factors for CVD in a rural Brazilian city, using data from extended families. Whereas the calculation of heritabilities for CVD risk factors is not novel, analysis of data from this highly admixed population is worthwhile. The analytical methods used are state-of-the-art, and the data appear sound. The manuscript adheres to relevant standards for reporting; there is no discussion of data deposition. The discussion and conclusions are well-balanced and adequately supported by the data, and the title and abstract accurately convey the results. The major problem is the many stylistic/grammatical errors. I have copied the manuscript into Microsoft Word and have made the necessary changes using Track Changes. The Editorial Office has promised to forward this document to the authors.

**Major Compulsory Revisions:**

1. There are a large number of stylistic and grammatical errors in this manuscript. I consider these major revisions only because there are so many of them.

2. Please define the cutoffs used for high fasting glucose, high blood pressure, truncal obesity, high triglycerides, low HDL-c, high LDL-c, and high TC. How did you define people as smokers? In the legend of Table 1, what do you mean when you say that "Values for dichotomized traits are expressed in percentages of altered values"?

**Minor Essential Revisions:**

1. **TABLE 1:** Diastolic blood pressure (not distolic)

**Discretionary Revisions:**

1. **BACKGROUND:** Although genetic epidemiologic studies have not always agreed with respect to genetic effects on CVD-related traits, this is not surprising, and the studies are not really "controversial". I have suggested rewording in the MS Word document.

2. **RESULTS:** Why weren't all 1,712 individuals included in analyses?

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.