Reviewer’s report

**Title:** Paraoxonase serum level activity in women with endometriosis: an observational study

**Version:** 1 **Date:** 19 May 2013

**Reviewer:** Alexis D Guedes

**Reviewer’s report:**

The study is interesting, performed with adequate methodology to evaluate the activity of PON-1 and brings different results compared to a similar article published by Verit et al in 2007. The diagnosis of endometriosis of Verit et al study was performed by visual inspection while in the present study; the diagnosis was made after histopathological analysis of biopsy sample. This difference should be discussed in the discussion section.

The categorization of the severity of endometriosis in two categories as minimal/mild and moderate/severe is important for standardization of clinical trials, but considering the absolute numbers and grading of enzyme activity studied, this categorization may have overlapped patients somewhat difficult to obtain results of a positive association. The analysis considering the four categories was performed? If it was not made, it is possible assess the activity of PON-1 across the four groups? If not, I think this aspect should be considered in the discussion section.

**Level of interest:** An article of outstanding merit and interest in its field

**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