Reviewer's report

**Title:** An iron-based beverage, HydroFerrate Fluid (MRN-100), alleviates oxidative stress in murine lymphocytes in vitro

**Version:** 1  **Date:** 15 January 2009

**Reviewer:** Steven B Oppenheimer

**Reviewer's report:**

This is an exciting and interesting manuscript. It is very easy to read and it is well referenced with many recent citations. There are some major problems.

I can't make heads or tails of the figures that are not bar graphs. The bar graph figures are clear
but the others need much more explanation. My copy has no Fig 4 legend and no Fig 5 legend.
The Fig 3 legend talks about Fig. 1A, B, etc. One figure is so tiny I can't see the details.

The information in the blot is impossible to understand without much more explanation. By eye,
it is difficult to see in the blot what the authors describe in the Results and Discussion. The details of the blot analysis must be one focus of this paper.

If the material is consumed by mice via drinking, what would be the effects? Effects on cells as examined here may not occur if the material is ingested. But, I would not require a new study on drinking the material. That could be the subject of another paper. The issue, however, should be discussed in detail here.

It is difficult to determine if this work was repeated. How many times? How many mice in each group? There are statistics but much more must be detailed about what data went into the analyses.

I believe that most of my criticisms can be fixed to make this an excellent paper.

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

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.