Reviewer's report

Title: Paraoxonase-1 is related to inflammation, fibrosis and PPAR delta in experimental liver disease

Version: 1 Date: 24 October 2008

Reviewer: Fabio Marra

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MAJOR COMPULSORY REVISIONS

1. No explanation is provided as to why mRNA levels drop and protein is increased. After 12 weeks, protein levels should follow those of steady-state mRNA levels, otherwise one of the two determinations may be not reliable. The intrahepatic levels of PON1 must be reassessed using an alternative method, to confirm the present results.

2. No direct proof of the interaction between MCP-1 and PON1 is provided. It is said that the two proteins are directly related, but actually in the discussion it is stated that when PON1 is high, MCP-1 is low (page 10). How should one understand? Similarly, the possible regulation of PON1 by PPAR-delta or cathepsin B is only hypothetical, and this should be clearly stated. It is said that cathepsin B decreased during CCl4 administration, but I could not gather this information from Figure 4.

MINOR ESSENTIAL REVISIONS

1. The role of PON1 has been previously shown in the liver, including data with PON1 overexpression. It should be more clearly stated to what extent this study provides novel information.

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