Reviewer’s report

Title: Regulation and Splicing of Scavenger Receptor Class B Type I in Human Macrophages and Atherosclerotic Plaques.

Version: 1 Date: 22 February 2005

Reviewer: Kathleen M Botham

Reviewer’s report:

General

In this paper the authors have studied the expression of the scavenger receptor SR-BI and its isoforms in human macrophages derived from healthy or atherosclerotic subjects. The results show that SR-B1 is expressed in both cases to a similar extent, and that expression is reduced by hypoxia and increased by minimally modified LDL. Expression of SR-BII was also detected in macrophages and in atherosclerotic plaque, and a previously unknown isoform, referred to as SR-BIII was also detected. These findings provide some new information about the potential role of SR-BI in atherosclerosis.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

none

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. The macrophages used were obtained from healthy subjects, or those with atherosclerotic lesions. It is not clear however, which type of macrophages were used for the experiments on the effects of hypoxia and mmLDL, and for the investigation of the expression of SR-BII. I assume these were from healthy donors, but this should be indicated in the Abstract, methods/results and appropriate Figure legends.

2. The size of the products for SR-BI and SR-BII should be given in the Method section (p8).

3. There is no Figure 1A (referred to in para 1).

4. As Figure 1 contains only two values, it could be deleted and the figures given in the text.

5. Legend to Figure 2, line 1, the word 'donors' seems to be missing

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research
interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests