Reviewer's report

Title: How many general and inflammatory variables need to be fulfilled when defining sepsis due to the 2003 SCCM/ESICM/ACCP/ATS/SIS definitions in critically ill surgical patients: a retrospective observational study

Version: 3 Date: 21 April 2010

Reviewer: Frank Bloos

Reviewer's report:

Major Compulsory Revisions

none

Minor Essential Revisions

Page 3 (last line): 'Prevalence' should be changed to 'Frequency'. Prevalence was not addressed in this study. This is also true for other parts of the text. Prevalence is an epidemiological term which does not quite fit.

Page 4 (Methods): 'cases >= 18 years' should be changed to 'patients >= 18 years of age'. Same is true for the following lines and page 6 (results, 1st paragraph)

Page 5, 1st paragraph: explain abbreviation SvO2.

Page 6 (last paragraph and the following paragraphs). Please, do not repeat numbers from the tables or figures. In the text, just describe whether i.e. mortality is decreasing or increasing when applying the cut-offs.

Page 7 (discussion, 1st paragraph): '...criteria markedly influenced...' better '...criteria were markedly associated with...'

Page 10 (conclusion): 'cut off of greater than 3/8... may underclassify'. I don't get this one. Shouldn't it say 'cut off of lower than 3/8... may underclassify'? Same is true for key massages, last paragraph.

Discretionary Revisions

The discussion is still rather long. The manuscript would improve from a more focused discussion.

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.