Reviewer's report

Title: A prospective study of physical activity and the risk of pancreatic cancer among middle-aged women (United States)

Version: 1 Date: 22 September 2007

Reviewer: Shoichiro Tsugane

Reviewer's report:

General

The study tested the association between self-reported physical activity (PA) and risk of pancreatic cancer in the BCDDP follow-up study. The authors found that PA (both moderate and vigorous) was inversely associated with the risk of pancreatic cancer. In general, the study was soundly conducted and the findings were carefully presented, although the sample size was too small to detect the statistical significance by subgroup analysis and no validation data was available for PA assessment among the participants.

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

1. Although the number of cases was small, excluding only the first year of the follow-up could not be enough to defense the reverse causation. At least the first three years should be excluded and the data should be shown in the table or the text.

2. In the discussion on the CPS-II finding (second paragraph of p14), the authors made contradictory statements that reverse causation was possible explanation for different findings between recreational PA at entry and that at ten year before entry. If the reverse causation was applied, inverse association between PA and pancreatic cancer should be more strengthen in the recent assessment, because an ill-health condition due to pancreatic cancer would reduce PA. This reviewer cannot follow this discussion.

3. The mean age of the study participants was relatively old (61.2 years) and the quality of PA may be different by age. The findings in stratified analysis by age may be informative and the data will preferably be described in the text.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory 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, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.