Reviewer's report

Title: Physical activity and renal cell carcinoma among black and white Americans: a case-control study

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Reviewer: anders mellemgaard

Reviewer's report:

The paper is reporting the findings from a large case-control study in renal cell carcinoma regarding physical activity.

The study was conducted in 2 areas and efforts were made to include black patients/controls.

The study is essentially negative since the previously described protective effect of physical activity was not found.

The paper is well written, easy to read but perhaps a little brief, especially when it comes to the discussion of the findings.

I have no comments on methods which are straight forward.

I miss more information on non participants (1/3 of eligible cases and more than half of eligible controls were not included). Why were so many individuals not included, and what does this mean to the analysis and findings. Is it possible that blacks with hard physical work (possibly associated with short education and low salary) are overrepresented in the non-participants?

Physical exercise on work and leisure time are probably two very different things. Does the authors have any thoughts as to difference in relevance of the different types of physical activity??

Does the authors have any thoughts as to the difference between the studies which were positive vs negative with respect to findings of PA as a risk factor for RCC??

Conclusion:
The study is relevant
The study is traditional and well designed but a large number of non-participants raises questions of representability
Data is presented in a conventional way
The authors correctly lists the limitations of the study
The paper is reasonably well written.
I see no need for a statistical review

I find that the paper are important to those with closely related research interests.
I would suggest that the paper is accepted provided a minor revision is made which expands and improves the discussion.

I declare that I have no competing interests

**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' below