Reviewer's report

Title: Survival advantage of partial over radical nephrectomy in patients presenting with localized renal cell carcinoma

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Reviewer: Jose Karam

Reviewer's report:

The authors report on a large multi-institutional series of patients with renal cell carcinoma, treated with radical or partial nephrectomy, and compared overall survival based on type of surgery received. The authors concluded that partial nephrectomy provides an overall survival advantage compared to radical nephrectomy. The authors appropriately acknowledged the shortcomings of their study, which are quite significant. These included retrospective design, lack of information on comorbidities (which is important when using overall survival and not cancer specific survival as an endpoint), lack of information on renal function, lack of central pathology review, among others.

Major Compulsory Revisions

1- The authors need to add the work by Lane et al into the second paragraph of Introduction (PMID:23201493) when they discussed surgically-induced CKD.

2- How was "significant" preexisting CKD defined in the Methods section? How was this done to define elective versus imperative PN given that the authors report preoperative renal function was not always available?

3- What was the complication rate in the PN versus RN groups?

4- What was the difference in renal function after PN versus RN?

5- Please comment in detail in the Discussion section on the manuscript by Shuch et al where he nicely showed the large potential for bias when interpreting survival benefits of PN versus RN (PMID:23674264)

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