Reviewer’s report

Title: Renal surgery for kidney cancer in Germany 2005-2006: Length of stay, risk of postoperative complications and in-hospital death

Version: 3 Date: 4 June 2014

Reviewer: Michael Leitzmann

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Discretionary revisions

The statistical analysis employed linear regression. It would be nice to see a statement in the methods section that the model linearity assumptions were not violated.

The results section states that the probability of partial nephrectomy was lower among women than men, and that that difference was more pronounced among patients aged 60 years of more. It would be interesting to know whether the difference according to age was statistically significant by conducting a formal test for interaction.

The second full paragraph of the results section should state that 95.4% of urologic complications were due to acute renal failure. The current wording is a bit confusing.

In the discussion section you mention the possibility of a “selection effect” in that renal cancer treated by laparoscopic nephrectomy tends to have a lower stage at diagnosis. Please confirm that your database did not include a variable representing stage at diagnosis, for which you could have controlled in the analysis.

Further, in the discussion section you state that previous studies had only a limited number of ICD codes to derive a comorbidity index. Please give the reader an idea of the number of ICD codes that were available in previous studies, as compared to your study.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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.