Reviewer’s report

Title: Adrenocortical cancer: mortality, hormone secretion, proliferation and urine steroids - Experience from a single centre spanning three decades

Version: 0 Date: 25 Jul 2015

Reviewer: Peter Igaz

Reviewer's report:

This is an interesting and well-written manuscript on the experience of a single center on ACC.

The analysis of data was carefully planned.

Comments:

i. Considering the differences in childhood and adult ACC, I don't find it advantageous to include childhood cases in the analysis, as the majority of patients were adults. I therefore propose to remove childhood cases from the overall analysis, and discuss these briefly in a separate section.

ii. Based on novel functional genomics profiling studies, ACC can be classified in two major classes: one with better, the other with worse prognosis (e.g. de Reynies et al., 2009, J Clin Oncol, Giordano et al., 2009, Clin Cancer Res). This could be discussed, as there are also ACC cases with better and worse prognosis presented in this report.

iii. The term "concomitant pheochromocytoma" among the laboratory findings is disturbing to me. Is this supported by histological data? Were the catecholamine levels so high (over 2-3x the normal) that pheochromocytoma could really be considered? I propose to revise this.

iv. It is interesting that 2 patients (4%) had neurofibromatosis type 1, as ACC is not typical in NF1 (in contrast to pheochromocytoma). Was the diagnosis of NF1 clear, probably based on clinical parameters? The histological analysis of adrenal tumors in these NF1 cases was clear-cut?
v. The figure legends Fig3-5 with these table like format are unusual, I propose to modify these, or include them in the figures themselves.

vi. It is not really clear why the Weiss-score could not be determined. I suppose that the histological slides are still available, and these could be analyzed for the Weiss-score even retrospectively. This would add useful further information to the manuscript.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable
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