Reviewer’s report

Title: The Mineralocorticoid Receptor Antagonist Eplerenone reduces Renal Interstitial Fibrosis after long-term Cyclosporine Treatment in Rat

Version: 1 Date: 8 September 2012

Reviewer: Olaf Grisk

Reviewer’s report:

Major Compulsory Revisions

1. Drug administration: Please indicate the vehicle used for CsA and clarify for what the equal amounts of “saline” were for? (Page 5)

2. The authors use the ratio [inulin infusion rate/plasma inulin concentration] for determination of inulin clearance. The absolute values for GFR per gram kidney weight reported in Fig. 2 are very low. Depending on the rat strain normal GFR is around 0.7 – 1.0 ml/(min * gKW) in adult rats. Potential error sources could be related to the infusion rate or the determination of plasma inulin concentrations. Please check for this.

3. What is the basis for the assumption that rates of inulin infusion and renal inulin excretion were equal after four days (page 6, last paragraph)? If this were the case the ratio could not be used to estimate differences in GFR. More likely, the inulin excretion rates stabilized to constant values after four days. Was this checked in pilot studies? Potential differences in plasma volumes between experimental groups leading to different relationships between inulin infusion rate and plasma concentration could have been an additional small source error source for the determination of GFR.

Minor Essential Revisions

1. The reason for performing Western blots on E cadherin and smooth muscle actin as markers for epithelial to mesenchymal transition should be briefly introduced for the reader. Please add some methodological details on this part of the study. To keep the present length of the methods section other parts such as inulin and plasma electrolyte measurements should be shortened.

2. The manuscript should be checked for language style and typing errors. The last part of page 12 discussing uremia and malnutrition needs particular attention.

3. Table 2: Values for SEMs on body weight should be added.

Discretionary Revisions

Drop outs are mentioned in the methods section and they should be removed from the results since this is not a main finding.
**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:**

This reviewer has been visiting the Dept. of Cardiovascular and Renal Research at the Institute of Molecular Medicine, Univ. of Southern Denmark, Odense in March 2012 as an invited speaker for which he received reimbursement.

With this exception there is no further competing interests.