Reviewer's report

Title: Urine IL-18, NGAL, IL-8 and serum IL-8 are biomarkers of acute kidney injury following liver transplantation

Version: 1 Date: 29 August 2012

Reviewer: LIOTIER Jérôme

Reviewer's report:

Please find the following report for the review of a manuscript that has been submitted to BMC Nephrology by Jeffrey C Sirota and colleagues. I accept with Minor Essential Revisions:

1. Is the question posed by the authors well defined? Yes

2. Are the methods appropriate and well described? Yes but can be improved:
   Firstly, why you have chosen the urine NGAL rather than the serum NGAL for AKI?
   Secondly, renal insufficiency (acute or chronic) is not a exclusion criteria : there is only dialysis or kidney transplant. The results show however a mean pre operative creatinin of 0.81 mg/dL in the AKI group which excludes a priori renal failure but it is 1.07 mg/dL in the non AKI group( p=0.21).
   Thirdly, why have you taken in the definition of Aki an increased of cystatin c while it was not written in the chapter material and methods and it is a poor marker of acute renal failure except for chronic renal failure? (Dharnidharka VR, Kwon C, Stevens G. Serum cystatin C is superior to serum creatinine as a marker of kidney function: a meta-analysis. Am J Kidney Dis. 2002;40:221-6.)

3. Are the data sound? Yes but could you explain the low incidence of AKI in your population while it was expected highest (78% according your reference (1))?

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes but why do not you apply a treatment to increase biomarkers as suggested in conclusion?

6. Are limitations of the work clearly stated? Yes but some are missing:
   - First, there is lack of power in this study (only 40 patients)
   - Second, creatinin is not the gold standart for the diagnosis of AKI
   - Third, the choice of IL 18 and IL8 is questionable because there are not the best AKI biomarkers (Liang XL, Liu SX, Chen YH, Yan LJ, Li H, Xuan HJ, Liang YZ, Shi W. Combination of urinary kidney injury molecule-1 and interleukin-18 as

- Fourth, the choice of a measure 24 hours after liver transplantation is questionable because many biomarkers increased in the first hours postoperatively and you need respect kinetics of the biomarkers.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes

8. Do the title and abstract accurately convey what has been found? Yes

9. Is the writing acceptable? Yes

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

'I declare that I have no competing interests' below