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: 9 September 2012

Reviewer: Francesca Tinti

Reviewer’s report:

Authors describe the assessment of serum and urine biomarkers for detection of acute kidney injury (AKI) in patients undergoing liver transplantation (OLT), with the hypothesis that these would be higher in patients who develop AKI compared to patients who do not.

The question posed by the authors is well defined and the discussion and conclusions well balanced and supported by the data. Limitations are clearly stated. The writing is acceptable.

Major Compulsory Revisions

1. Authors should better describe methods for measurements of urine and serum markers (i.e. dosage was done on single or multiple samples, a brief description of process would be advisable for each interleukin).


3. Authors excluded from the analysis patients who had an increase in serum creatinine that was not sustained for 24 hours. They justified this decision defining these patients as having pre-renal kidney injury. They do not specify the pathogenesis of AKI as inclusion or exclusion criteria, therefore they should comment this resolution.

4. Authors comment about the result of lower pre-operative serum creatinine levels in patients with AKI compared to patients without. They should consider that pre-operative serum creatinine in cirrhotic patients should be reduced for different reasons, such as reduced synthesis of creatine, malnutrition, reduced muscle mass. It's reported that worst pre-OLT hepatic function is associated with an increased incidence of post-OLT AKI (Cabezuelo JB, Ramirez P, Rios A et al. Risk factors of acute renal failure after liver transplantation. Kidney Int 2006;69:1073-1080; Tinti F, Umbro I, Meçule A et al. RIFLE criteria and hepatic function in the assessment of acute renal failure in liver transplantation. Transplant Proc 2010;42:1233-1236). They should address this comment.

Minor Essential Revision
1. Glomerular filtration rate (GFR) is defined using a standard calibration formula on the basis of cystatin C levels. Authors should address this choose and explain why they did not use formulas based on serum creatinine.

2. Table 3 shows median pre-operative and post-operative biomarkers levels in patients who developed AKI and those who did not. Urine IL-8 results are reported in table but not in text.


4. Number 3 of affiliations is not reported among authors. Please review it.

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.