Reviewer’s report

Title: Delay in renal replacement therapy initiation increases mortality in patients developing acute kidney injury after liver transplantation

Version: 1 Date: 25 May 2012

Reviewer: Marlies Ostermann

Reviewer’s report:

This paper confirms that AKI is common after liver transplantation. The authors show that delayed RRT is associated with an increased risk of dying.

1. AKI was defined by AKIN criteria. Since the authors only had 24 hour urine volumes on their database, how did they apply the urine criteria of the AKIN classification?

2. It is not clear to me why the authors used RRT and creatinine peak as a combined outcome. Clinically there is a difference between a patient who needs RRT for severe AKI post transplantation compared to a patient whose creatinine rises from 60 to 100 mcmol/L and then to 110mcmol/L and then falls again. Since the authors were interested in “timing of RRT”, would it be useful to analyse the RRT and non-RRT groups separately?

3. Discussion: What is the basis for the statement “uraemic toxins are responsible for mortality independently attributed to AKI”?

4. How many patients recovered renal function after an episode of AKI and/or after needing RRT?

Additional comments:

Page 3: In paragraph “Data collection”, the authors state that the medical records were reviewed prospectively. Was the data review not done retrospectively?

Level of interest: An article whose findings are important to those with closely related research interests

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

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