Reviewer's report

**Title:** Long-Term Survival and Predictors for Mortality among Dialysis Patients in an Endemic Area for Chronic Hepatitis: A National Cohort Study in Taiwan

**Version:** 1  **Date:** 5 January 2012

**Reviewer:** Kunal Chaudhary

**Reviewer's report:**

- **Major Compulsory Revisions**
  1. The study is a retrospective data analysis conducted from a large national insurance dataset, but the authors reference other publications on the endemicity of hepatitis B and C, and utilize the diagnosis of liver cirrhosis as a variable. Liver cirrhosis may or may not be related to viral hepatitis in these cases and this question has not been addressed.
  2. No information is provided about the prevalence of viral hepatitis, or even liver cirrhosis, in the general population, as compared to ESRD patients, which would provide evidence to statement that ESRD patients are higher risk for chronic hepatitis and about endemic nature of hepatitis in Taiwan.
  3. Age has been categorized as an interval variable, but overall average age in HD and PD patients has not been stated. Based on proportion of patients, the HD group seems to have a disproportionately higher number of elderly populations. How does this confound the finding of poor survival in HD population?
  4. The statistical model is not explicitly stated and appears inadequate. Parametric pearson’s chi square test is utilized to compare each variable in HD and PD patients. Non-parametric tests are used for other analysis. Interaction is checked for statistical significance, but the complete model used for cox regression analysis is not stated. The clinical significance of this interaction is unclear to me. Log rank statistic used to measure statistical significance in survival of patient on PD vs HD provides a cumulative measurement over 10 year period and does not provide any other information. The survival in figure 2 shows varying rates of survival in PD patients and an almost linear pattern in HD patients. What could be the possible reason for the initial benefit in PD patients has not been analyzed.

- **Minor Essential Revisions**
  1. There are some grammatical errors thru the manuscript which need attention.

- **Discretionary Revisions**
  1. The cause of death in each modality has not been reported. If this data is available it may be of benefit to report in HD and PD cases.
Level of interest: An article whose findings are important to those with closely related research interests

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'