Reviewer's report

Title: All-cause and cause-specific mortality associated with diabetes in prevalent hemodialysis patients.

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Reviewer: Emmanuel Villar

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Sattar et al present a secondary analysis of the HEMO Study that underlines that the risk for death associated with diabetes increases with time. The study is conformatory by nature (see: Karame et al Nephron Clin Pract 2009, Villar et al J Am Soc Nephrol 2007). The paper is well written and the statistical analyses are properly conducted.

Major Compulsory Revisions
A. The result may be distorted by several biases:
   1. Patients are prevalent ESRD subjects. This may bias survival analysis study (lead time bias; see: Tripepi et al Kidney Int 2008)
   2. There’s no distinction between type 1 and type 2 diabetes. Previous studies points out that patient’s characteristic and prognosis differ significantly between diabetes types.
   3. Years of dialysis (dialysis vintage) differ between diabetic and non-diabetic, as well as co-morbidity ICED scores.
   Authors should discuss these clinical issues in the limitation section of their paper. Despite adjustment, these points may have biased the main results.

B. Analysis of the literature shows that there is an interaction between diabetes and gender regarding survival after first dialysis (Villar et al Diabetes Care 2007; Karame at al Nephron Clin Pract 2009, Carrero et al Nephrol Dial Transplant 2011). Did authors test this interaction in the HEMO Study dataset?

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests