Reviewer's report

Title: Analysis of Factors Predicting Mortality of New Patients Commencing Dialysis Therapy in a Single Year after 10 Years Follow-Up

Version: 3 Date: 18 May 2013

Reviewer: Martin Wilkie

Reviewer's report:

Overall
This is a well written paper describing the 10 year outcomes for a cohort of 94 patients who started dialysis in East Yorkshire. The authors are to be congratulated on a detailed and proportionate analysis. They acknowledge the principal limitation which relates to the number of variables that are explored in a relatively small population, thus presenting the risk of a type 2 error. The novel observation is that calcium x phosphate product is not a factor that is shown to influence 10 year patient survival in this cohort.

Points
I would be interested to know the process by which cause of death was arbitrated. The reason for asking this is that there is the potential for ambiguity – for example a patient who is fluid overloaded due to failure of dialysis therapy would die a cardiac death, or a patient who discontinues dialysis may for example die of pneumonia.

I would be interested to know whether primary modality of dialysis therapy influenced long term survival – although this can be confounded by unplanned vs planned presentation for dialysis.

There is no mention of biochemical methodology (albumin assay for example) and the approach to co-morbidity scoring (was this done prospectively at entry to the study). How was presence of vascular disease identified or defined?

eGFR is described in the methodology – but table 2 uses “GFR” – is this an inconsistency?

Opinion
An important paper that should be accepted subject to minor alterations.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:
I am the editor in chief of Peritoneal Dialysis International.