Reviewer's report

Title: Kidney disease in patients with type 2 diabetes: prevalence and associated variables in a random sample of 2,642 patients from a Mediterranean region (Catalonia, Spain).

Version: 2 Date: 14 May 2012

Reviewer: Richard J MacIsaac

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“Kidney disease in patients with type 2 diabetes; prevalence and associated variables…………….”

General Comments:

Thank you for asking me to review this paper. It is a cross-sectional study of the prevalence of chronic kidney disease in 2642 people with type 2 diabetes.

The type of chronic kidney disease was determined on a single determination of serum creatinine and urinary albumin. GFR was determined by the MDRD equation and albuminuria was determined by a spot albumin/creatinine ratio. Of note, gender differences in the cut off the presence of micro or macro albuminuria were not used. A single ACR cut off of 3.5 mg/mmol was used to determine microalbuminuria and a cut off of 35 mg/mmol was used to determine microalbuminuria.

Albuminuria data was only available on 1478 patients.

The presence of different types of renal disease was 34.1% for kidney disease (eGFR <60ml/min and the presence of micro or microalbuminuria), 22.9% for renal impairment (defined as an eGFR <60ml/min per 1.73 m2), 19.5% for albuminuria and 16.7% for diabetic nephropathy (defined as the presence of macro or microalbuminuria plus diabetic retinopathy).

The study also determines the presence of non albuminuric renal insufficiency which was found to be 14.7%.

In a fashion similar to previous studies, patients with different characteristics were found to have renal impairment compared with those who had albuminuria.

Overall I would recommend that the study would be suitable for publication after some major revisions.

Compulsory revisions:

1) My main concerns are that the authors need to more clearly show what new information they have provided over and above that which was documented in the renal dysfunction in type 2 diabetes UK prospective diabetes studies 74 (Diabetes 2006, 55, 1832).
2) I think the reader would also find it useful if the definitions for the different types of renal disease were stated in the abstract.

3) What is the precedence for defining diabetic nephropathy as presence of microalbuminuria or the presence of microalbuminuria with associated diabetic retinopathy?

4) Do the results took the same if gender specific cut off for ACR are used, i.e. 3.5 mg/mmol for females and 2.5mg/mmol for males to define microalbuminuria.

5) Perhaps the authors could also mention the fact that a new preposed classification system for chronic kidney disease has been proposed and incorporates both albuminuria category and estimated GFR category (KDIGO controversies conference report 2012, Levey et al, Kidney International (2011), 80, 17-28.)

**Level of interest:** An article of importance in its field

**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' below