Reviewer’s report

Title: Increased incidence of kidney diseases in general practice after a nationwide albuminuria self-test program

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Reviewer: Anteo Di Napoli

Reviewer’s report:

I am still perplexed about the choice of using Cox regression analysis. The authors have added a paragraph in Methods section where they stated the three reasons to prefer Cox regression analysis above logistic regression analyses:

1) In this study a dynamic population is used, including patients with incomplete follow-up. Cox regression makes it possible to include these patients, which not only results in a more precise estimate of the effect, but also prevents selection bias.

2) Cox regression makes it possible to compare the number of newly detected cases with the time of occurrence.

3) With Cox regression Hazard ratio’s are calculated, which can be interpreted as an Incidence Rate Ratio. This makes it possible to compare the output of the regression analyses with the incidence rate ratio’s calculated in the second analysis.

However, my questions are:

1) How did the authors define the time-to-event? Did they consider the whole study period (except for the patients with an incomplete follow-up) or the time to diagnosis? This issue is not clear for me.

2) How did they define the start point for survival time analysis? Did they define a start point for each patient (which one?) or did they assume for all the patients the date of 1 September 2005 (for the pre-period) and 1 November 2006 (for the post-period)? This issue is not clear for me.

3) Thus, if the authors did not use defined start, end and censoring points, how did they model the time-to-event? This issue is not clear for me.

My perplexities are supported by the observation that the results of incidence rates of kidney diseases/urinary complaints (table 2) are nearly identical to the results of Cox regression about the risk of being newly diagnosed (table 3).

I suggest that the authors could better clarify these issues

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 declare that I have no competing interests