Reviewer’s report

Title: Diabetes and the Occurrence of Infection in Primary Care: A Matched Cohort Study

Version: 0 Date: 13 Nov 2016

Reviewer: Wenjing Tao

Reviewer’s report:

Thank you for a well-written and interesting manuscript. This study examines the association between diabetes and common infectious diseases in primary care using a Canadian medical record database.

1. The study is described as a matched cohort study, but the unexposed were only matched on index year. What was the rationale for a matched cohort study as opposed to a cohort study? The authors mention that matching on age was not possible due to insufficient numbers, but were frequency matching considered for e.g. age and sex? It would be helpful if the authors could comment further on their choice of study design in the manuscript.

2. In the background, macrovascular disease and microvascular dysfunction are mentioned as possible mechanisms explaining susceptibility to infections in diabetes patients. However, the authors are adjusting for macro- and microvascular disease in the multivariable analysis, which would theoretically remove some of the mediating effects of macro/microvascular disease. Could the authors elaborate on this?

3. Table 4: 4 year period is not specified in the table (compare Appendix D)

4. On page 10, paragraph 2: "…42.7 per 100PYs vs. 42.5 per 100PYs" should refer to table 3 instead of 4.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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