Reviewer’s report

Title: Sulfonylurea Use and the Risk of Hospital Readmission in Patients with Type 2 Diabetes

Version: 0 Date: 14 Oct 2015

Reviewer: Akinobu Nakamura

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Heaton, et al. compared the risk for diabetes-related hospital readmission in patients with type 2 diabetes treated with sulfonylureas (SUs) compared to those treated with other oral antihyperglycemic agents (AHAs). In this study, they concluded that SU use is associated with an approximately 30% increased risk for hospital readmission compared to other oral AHAs. This large retrospective cohort analysis is important with respect to showing that SU use is related to a higher risk for hospital readmission. However, the serious problem with this study is that there are many mistakes in data of this study.

Specific comments

Criticism 1: (Results) Page 8, line 56: "Of these patients, 5.7 million patients were on SU therapy (SU or SU+), and the remaining 7.8 million were on non-SU oral agents (noSU and noSU+) as shown in Table 1." This sentence is not consistent with the data of Table 1.

Criticism 2: (Discussion) Page 11, line 23: "(23.2% versus 16.1; p=0.003)". Authors should change this into "(23.2% versus 16.1%; p=0.003)"

Criticism 3: (Table 2): Authors should fill in a blank of total all patients.

Criticism 4: (Table 2): The sum of patients classified by race is not consistent with total patients in the SU cohort.

Criticism 5: Table 3 shows that eye disease is also significant predictor of readmission. However, there was no description about this in the Results or Discussion sections.

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.

No

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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Please indicate the quality of language in the manuscript:

Acceptable

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