Reviewer’s report

Title: Impact of Drug Burden Index on adverse health outcomes in Irish community-dwelling older people: a cohort study

Version: 1 Date: 20 Dec 2018

Reviewer: Sven Stegemann

Reviewer's report:

The study investigates the drug disease burden index for the older Irish population. Similar studies have been published by other authors and as such the publication add additional data to the Topic.

While the publication is well written and the data are comprehensive, some minor Points should be considered.

1. The data base used (GMS) covers only 40 % of the Population of the 60-65 years, while for the above > 65 years 96 % are expected to be covered. In both cases the coverage is linked to the income. The authors might consider to discuss the potential Impact of the socioeconomic Status of the patients involved in the data and the eventual Impact on the outcomes.

2. As not every Reader is familiar with the drugs included in the DBIs, the publication would gain from the Addition of the DBI drugs considered in this study and their potential dose-ADR consideration.

3. In table 3 the educational Level is described as "Primary", "secondary" and "tertiary", without any Explanation what this is refering to. Details should be included in the table legend.

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 am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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