Reviewer’s report

Title: A Risk Score for Predicting Atrial fibrillation in Individuals with Preclinical Diastolic Dysfunction: a retrospective study in a single large urban center in the United States

Version: 0 Date: 21 Oct 2018

Reviewer: Takahiro Okumura

Reviewer's report:

In the manuscript entitled "A Risk Score for Predicting Atrial fibrillation in Individuals with Preclinical Diastolic Dysfunction: a retrospective study in a single large urban center in the United States", the authors retrospectively investigated the potential factors of new-onset atrial fibrillation (AF) in patients with preclinical diastolic dysfunction (PDD). They reported male Sex, Hypertension, Age, Race, Peripheral artery disease and Diabetes as independent predictors of new-onset AF. In addition, the authors proposed a novel SHARP-D score that predicts incidence of new-onset AF. These results are scientifically sound. However, I have annotated the manuscript with several major concerns, which I believe will improve the readability of the paper.

#1. A prediction score of new-onset AF for the next 10 years is reported for Japanese (Kokubo Y, et al. Circ J. 2017 Oct 25;81(11):1580-1588). In this study, the average observation period is 54 months. However, in constructing the SHARP-D predicting score, the concept concerning the time course is lacking. The authors need to discuss this point including the research limitation with reference to this paper.

#2. Why did the authors define E/A ratio ≤0.8 and E/e’ ratio <10 as PDD? According to Reference No.16, the E/A ratio of ≤0.75 is adopted as the definition of Stage 1 (Impaired Relaxation).

#3. Although these results are concluded from the retrospective study, the authors should emphasize clinical perspectives more strongly about the possibility of clinically managing these factors to prevent new-onset AF, especially in hypertension, diabetes and PAD.

#4. (Page 10 Line 16) Nevertheless, even (It need not be italic type.)
**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**
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