Reviewer's report

Title: Trends in diagnostic prevalence and treatment patterns of male and female ankylosing spondylitis patients in the United States, 2006-2016

Version: 2 Date: 20 Jun 2019

Reviewer: Nurullah Akkoc

Reviewer's report:

The revised manuscript addressed the most of the comments raised by the reviewers, adequately.

However, I believe that stating "These codes have been used in numerous AS studies" only, does not strengthen the reliability of the very low prevalence estimate of AS found in their study.

I agree with the authors that the ICD codes used in their study were used also in earlier studies, but importantly with varying case definitions in different settings (Haroon, et al. 2014, Curtis, et al. 2016, Videm, et al. 2017). As shown in the study by Curtis et al 2016, using different case definitions based on the same ICD codes may lead to significant variation in the prevalence estimates even in the same setting (i.e a more specific case definition based on ≥ 2 diagnoses by a primary care specialist or ≥ 1 diagnosis by a rheumatologist, decreases the prevalence of AS by almost half). It should also be noted that, the latter two studies did use methodologies to show the level of validity of their estimates for their own settings (Curtis, et al. 2016, Videm, et al. 2017).

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

No

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

Unable to assess

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 am able to assess the statistics

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

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