

## Response to the Reviewer

I revised Muhammad Zubair Khan's manuscript, which analyzes the association between atrial fibrillation and rheumatic diseases. It impresses from the beginning the large number of patients in their study. I have some comments to make, especially regarding the statistical analysis and the expression of the results.

Thank you very much for reviewing the manuscript. We appreciate reviewers' thoughtful comments.

1. **It must be remembered that logistic regression provides Odds Ratio for each predictor. The odds differ from the risk, therefore you should consider changing the title.**
  - As per reviewers' comment, We have changed the title to "Burden of Atrial fibrillation in Patients with Rheumatic Diseases"
2. **One thing is missing from your database, namely pulmonary hypertension. I think it's an easy parameter to get from the National Inpatient Sample database. Rheumatic diseases are associated with pulmonary hypertension and this could greatly alter multivariate regression and you may not get the same results on atrial fibrillation.**
  - We have added Pulmonary hypertension to the study and reanalyzed the database. As reviewer mentioned, study results were significantly altered after adding pulmonary hypertension.
3. **There are some data that need to be added in the Results Section:**
  - a. **What was the correlation coefficient between atrial fibrillation and heart failure ? cardiomyopathy ? and hypertension ?**
    - By Spearman correlation coefficients analysis, AF were positively correlated with heart failure ( $r=0.53$ ,  $p=0.001$ ) and hypertension ( $r=0.16$ ,  $p=0.001$ ). These numbers were not included in the study as we already have included odds ratio in the study results.
  - b. **What method did you use for your regression model ? Enter ? Forward Stepwise ? Backward stepwise ?**
    - We used SAS software for the study data analysis and Enter method was used for regression analysis.
  - c. **What was the Odds Ratio for atrial fibrillation in Univariate Analysis ? Adjustment can be cheating if we keep adjusting by more and more variables until we have a significant difference.**
    - As per reviewers' comment, we have added Table 3 with "Univariate regression analysis for association of atrial fibrillation with rheumatic diseases ."