

Responses to Reviewers: #37861, Wood, et al.

Reviewer 1:

“In the abstract, the precise names of the TNF-inhibitors should be mentioned. It has to be clarified in the methodology that the patients were or were not diabetic. The study design is shallow and the disease activity should have been taken in to consideration. Discussion: Our data are unable to firmly demonstrate an effect on blood glucose for this medication or other TNFis in a cohort of rheumatoid arthritis patients... COMMENT: Which medication is referred to by the word ‘this’? Only 15 references is few for an original article. References should be added up to 40 references to enrich the introduction and discussion.”

Responses:

Thank you for the thoughtful and constructive review of our work. We will address the above points separately:

- 1) The precise names of TNF-inhibitors have been added to the abstract, as suggested.
- 2) In the second paragraph of our materials and methods, we have more explicitly stated that patients were included with or without an established diagnosis of diabetes.
- 3) Regarding the suggestion for disease activity to be taken into consideration, we acknowledge we have not accounted for a separate disease activity measure as a covariate; however, we do account for glucocorticoid usage, which has been utilized as a reasonable surrogate for large differences in disease activity in past publications (Wolfe et al Arth Rheum 2007 57(6):935-942 <http://onlinelibrary.wiley.com/doi/10.1002/art.22895/pdf>).
- 4) Thank you for pointing out the error regarding ‘this medication’, which should read, “etanercept”. This medication was the primary drug of interest in initiating this analysis and the typographical error was a carryover from a prior draft emphasizing analysis of this medication, in particular. The first paragraph of our discussion section has been corrected accordingly.
- 5) We have added additional content for background regarding this topic, particularly a very recent case report from our institution (see Pfeifer E, et al.). We believe the number of citations reflects the state of the science around this specific topic, with very little extant literature with respect to glucose effects with biologic anti-rheumatic agents, in particular.

Reviewer 2:

“The manuscript is well-written. Can authors explain why 90% of patients are male whereas in rheumatoid arthritis ratio of female:male is 2-3 to 1?”

Responses:

Thank you for the insightful and predominantly positive review. We have added a brief note within the first paragraph of the results section, ‘Baseline Characteristics’ which addresses this item. Briefly, the United States Veterans Affairs system, in serving military-service connected patients and their families exclusively, has a disproportionately male and middle-aged patient population which is reflected in the VARA registry; these patient demographics are consistent with those reported in the past in VARA publications as well as other VA-sourced publications. We have also added an acknowledgement of the

generalizability issue brought up by this reviewer in the 5th paragraph of our discussion, which discusses study limitations.