Author's response to reviews

Title: Influence of Patient Characteristics on Perceived Risks and Willingness to Take a Proposed Anti-rheumatic Drug

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To the Editors,

We would like to thank the editors and reviewers for their helpful comments. Attached is the revised manuscript which incorporates changes as suggested by the reviewers.

1. In the regression models we did evaluate RA patients with recent onset disease (< or = 3 years) but this attribute did not significantly contribute to the explanatory power and was not included in the final models.

2. I thank the reviewer for detecting an error in the manuscript regarding the methods for managing missing data. We did, in fact, use multiple imputation to address missing values. SPSS has a "missing value analysis module" which allows you to visually evaluate for patterns of missing values and estimate the means of missing values using a variety of methods. We did this with estimation-maximization methods and cited the supporting methods documentation from IBM SPSS. Single imputation is not an option in SPSS. I would note that SPSS only replaces values by imputation IF > 10% are missing. So for the dependent variables risk perception with 11.2% missing values there was imputation, but with DMARD willingness there was 10.0% missing values and thus no imputation was required. I added some descriptive comparison of the missing value analysis to describe how there may be some higher rates of missing values in low literacy, low education, but not low income or minority subjects.

3. In the discussion on page 14 we added further discussion of the significant but limited explanatory power of our predictive mode.

4. On page 10 we list groups where there is significant between group differences in risk perception. 4 patient attributes are listed: patients who were depressed, had past experience of a DMARD related serious adverse event, or were classified as low income or low educational status. This is correctly written
as "low income" as the comparator is "non-low income" - and the term high income would not be appropriate for all who do not qualify for medicaid (in the USA ~ 133% of poverty level).

5. I reordered the manuscript to place the integrated model of behavioral prediction to the introduction to help the reads understand the rational of why the measured variables were chosen.

I hope that you agree this is now a improved manuscript.

Thanks again,

Rich Martin, MD