Author's response to reviews

Title: Reduction of Parathyroid Hormone with Vitamin D Supplementation in Blacks: A Randomized Controlled Trial

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Author's response to reviews:

October 6, 2015

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Dr. James Mockridge,
Executive Editor,
BMC-series,
October 5, 2015

Dear Dr. Mockridge,

We appreciate the comments and feedbacks provided by the editors and the reviewers for our manuscript titled "Reduction of Parathyroid Hormone with Vitamin D Supplementation in Blacks: A Randomized Controlled Trial". We have
provided point-by-point responses to the comment below. On behalf of all the authors, I am resubmitting a revised version of our manuscript based on the suggestion provided.

Sincerely yours,
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Reviewer 1:

If this manuscript is accepted for publication, there should be a required change in the following sentence:

"In conclusion, this study highlights a dose-dependent decrease in PTH in Blacks with vitamin D supplementation confirming correction of vitamin D deficiency, but whether reduction of PTH it is safe to do is unproven."

The Reviewer objects to the statement that lowering PTH with vitamin D supplementation confirms correction of "vitamin D deficiency". As stated above, the word "deficiency" can be used in the presence of biochemical deficiency or clinical deficiency, neither of which occurred in this study. Therefore, what has been confirmed by lowering PTH with vitamin D supplementation is the feedback relationship between vitamin D and PTH. This is a mandatory change. The word "deficiency" has to be removed.

Response: Our previous work in this all Black cohort suggests that blood pressure is lowered 1 with correction of vitamin D deficiency as established by the Institute of Medicine (25-hydroxyvitamin D < 20 ng/ml). Thus our work suggests vitamin D deficiency beyond a feedback relationship between vitamin D and PTH. To comply with the reviewer’s request, we have removed the word “deficiency”. The word deficiency is used based on the IOM definition of vitamin D deficiency. Since Blacks in general have higher bone density, bone markers should not be used as a clinical outcome for evaluating vitamin D deficiency status. Unfortunately rigorous randomized clinical trial evaluation of other clinical endpoints for vitamin D deficiency in Blacks is limited. We acknowledge in the conclusion that no consensus exists on the definition of vitamin D deficiency or...
the optimal level of total serum 25-hydroxyvitamin D. Depending on which cut point is used (usually <20 or <30 ng/mL), some studies have shown that low levels of vitamin D are associated with increased risk for fractures, cancer, diabetes, hypertension, and death. 2

Lines 276-278 “This study highlights a dose-dependent decrease in PTH in Blacks with vitamin D supplementation confirming correction of low vitamin D, but whether reduction of PTH should be done or is safe to do is unproven. Identification of optimal levels of plasma 25(OH)D and PTH remain to be established.”

Other Comments:

1) Financial support: this should be moved so that it appears within the Acknowledgements section
Response: This has been moved to the acknowledgement section

2) Please use 'Background' instead of 'Introduction' in the Abstract and main text.
Response: We have replaced the word “introduction” with “Background”

3) Author contributions: please provide the specific contributions of all of the authors
Response: Specific author contributions have been provided

4) Supplementary Figures: summary titles for these two figures should be provided within the main text (just below the title for Figure 1.)
Response: Summary titles for the two figures have been added to the main text below the title for Figure 1.

References
