Reviewer’s report

Title: Vitamin D levels are low in adult patients with sickle cell disease in Jamaica and West Africa

Version: 2 Date: 5 June 2014

Reviewer: Virginia Stallings

Reviewer’s report:

The reviewer appreciated the edits and additions from the previous manuscript. There are several issues that if addressed may improve the understanding and contribution of the data.

Abstract: Consider adding a ‘aim statement’ or hypotheses. Note that these are analyses of stored blood samples collected from several different studies.

Methods: provide the years that the blood samples were collected. ie Nigerian samples were from 2001-2009, for example. This could be placed in Table 1.

Lines 98-101: the approach to documenting that the serum 25D concentration in the stored sample did systematically change over time is unclear to this reviewer. Add if the anthro measurement were collected by clinical care or research staff.

Line 147, add city and state for Loyola.

Discussion: Given my confusion on proof of sample stability, I am not ready to assume they are representative. Also, I don’t know how old the samples are, so there may have been changes in SCD care and health of pt with SCD, dietary intake, etc. So, know the years of collection will be helpful.

Conclusion: line 235, not sure what is mean by 'syndromic finding'?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests. VAS