Author's response to reviews

Title: Pitfalls of practicing cancer epidemiology in resource-limited settings: The case of survival and loss to follow-up after a diagnosis of Kaposi's sarcoma in five countries across sub-Saharan Africa

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Author's response to reviews: see over
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Krisha Mae Natan
BMC Cancer

Dear Editor:

Thank you very much for considering a revised version of our manuscript entitled “Pitfalls in practicing cancer epidemiology in resource-limited settings: The case of survival and loss to follow-up after a diagnosis of Kaposi’s sarcoma in five countries across sub-Saharan Africa” by Esther Freeman et al. for publication in BMC Cancer (Ms. No. 1021130603174933). In response to the reviewers’ comments, we have made several changes, which are described below.

**Reviewer #1:**

*Minor Essential Revision: -Country of origin as a variable should be included in Table 2 to indicate if residence in a particular country was associated with higher risk with the HR and confidence intervals.*

The hazard ratios presented in Table 2 are adjusted for geographic site, and this is indicated in the footnote to Table 2. To clarify, we have added a parenthetical note to the footnote that site indicates country. Adjusting for geographic site allows us to evaluate the effect of age, sex, and CD4 count on the occurrence of losses to follow-up independent of country of origin. Since the main focus of the paper is to highlight that loss to follow-up interferes with our ability to accurately determine survival at all the sites, rather than comparing outcomes across sites, we have specifically elected not to show the hazard ratios by country. Moreover, we do not claim nor do we believe that the clinic sites in this analysis are purely representative of all clinics in their respective countries. Thus, because our individual sites cannot be thought of as standing for their entire country, we felt it was misleading to highlight or draw undue attention to the independent effects of each site. This was a matter of great sensitivity to the participating authors from these resource-poor settings. In other words, the authors agreed not to overly emphasize that one clinic site was doing better or worse than another in terms of losses to follow-up. The point is that improvement is needed at all of them. Finally, we wish to mention that Figure 1, albeit unadjusted, does give some relative information of the influence of geographic site on the occurrence of losses to follow-up.

*Did the authors compare patients with biopsy-proven diagnosis against those with clinical diagnosis? were there any significant differences in overall mortality between these two groups? please include these in the manuscript*

We appreciate the reviewer’s question, and we are also very interested in this answer given the high frequency of diagnosis of KS without biopsy in sub-Saharan Africa. Unfortunately,
since mortality could not be accurately assessed due to bias incurred by the high rate of loss to follow-up (line 136-138), this precluded sub-group or multivariable analysis for that outcome. We did compare biopsy-proven KS to “clinical” KS for the outcome of loss-to-follow up, and found no significant differences in the two analyses except for the influence of CD4 count (lines 146-148).

**Reviewer #2:** No changes requested.

**Reviewer #3:** No changes requested.

Thank you very much for your consideration.

Sincerely,

Esther Freeman, M.D., Ph.D.