Author’s response to reviews

Title: Utility of Total lymphocyte Count as a Surrogate Marker for CD4 counts in HIV-1 infected Children in Kenya

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Version: 2 Date: 16 May 2011

Author’s response to reviews:

14th May 2011

The Editor
BMC Pediatrics,

Dear Editor
Thank you for reviewing our manuscript entitled ‘Utility of Total lymphocyte Count as a Surrogate Marker for CD4 counts in HIV-1 infected Children in Kenya’. Manuscript ID 8173379750141387.

Please find below my responses to the concerns and revisions raised by the reviewer:

Abstract:
The abstract has been revised to include a definition of severe immuno-suppression using CD4 categories.

Background:
1. The terms Sensitivity, specificity, positive and negative predictive values have been defined with respect to monitoring progression of HIV /AIDS.
2. The need for region-specific validation of CD4 and TLC is highlighted in the background.
3. The difference in cost of performing CD4 testing and TLC in Kenya has been explained.

Results:
1. A Table (4) has been added which stratifies the data on TLC and CD4 count by WHO stage as suggested. The table illustrates slightly better performance of TLC among children with WHO clinical stage 3-4.

Discussion:
1. The implications of the weak correlation observed between CD4 % and TLC is discussed by including additional relevant literature (Mahajan JAIDS 2004, Reddi BMC Pediatrics 2007, Bolton Moore JAMA 2007) in line with reviewer’s guidance.

2. Discussion from Mahajan et al. regarding the importance of repeated measures of TLC is included.

3. The importance of co-infections including tuberculosis is now discussed with relevant citation (Martin et al).

4. Reference has been made on the DART trial and implications for our study findings.

5. A section highlighting important study limitations and the need for further research in this field to inform WHO TLC cut-offs is included.

6. Minor typographic errors have been corrected.

Thank you once again for your consideration

Sincerely

Dr Dalton Wamalwa