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The Authors Reply

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Like the study by Hendriksen et al.,[1] in which 3826 African children were enrolled during hospitalization for severe malaria, our birth cohort study revealed high PfHRP-2 levels during fatal severe malaria (4619 to 30,169 ng per milliliter), a similar mean level during non-fatal severe malaria (1245 ng per milliliter in our study vs. 1046 ng per milliliter in Hendriksen et al.), and occasionally low or undetectable levels of PfHRP-2 during severe malaria. We also reported higher mean PfHRP-2 levels in children with high-density infections and only mild symptoms than in the same children during severe malaria episodes, which suggests that PfHRP-2 level is an indicator of parasite biomass and the duration of infection rather than disease. Mean parasite density and PfHRP-2 level are generally higher during severe malaria, but there is considerable overlap of PfHRP-2 values in severe and uncomplicated cases of malaria,[2-4] an observation that has been reported in studies that incorporate retinal findings.[5] Severe malaria with very low or undetectable levels of PfHRP-2 has often been reported.[2-4] Our findings and earlier obser-vations[2,3] suggest that factors in addition to total parasite biomass may contribute to malaria severity, including organ-specific parasite burden, local or systemic immunopathology, and parasite virulence. Our study also shows that immunity to severe malaria develops long before immunity that controls parasite burden.

References

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Since publication of their article, the authors report no further potential conflict of interest.