Reviewer’s report

**Title:** The relationship of systemic inflammation to hospitalization in adult patients with cystic fibrosis

**Version:** 4  **Date:** 15 September 2011

**Reviewer:** Nicole Hamblett

**Reviewer's report:**

The authors have addressed the majority of concerns, however there are still a few minor revisions needed to not overstate the association between hospitalization, which was a history of, and the biomarkers.

- The title needs to include “prior” in front of hospitalization. This was not a cross sectional study that measured biomarkers at the time of hospitalization versus not

- Statistical methods - there is mention of a logistic regression whereby prior hospitalization is the outcome; this model is not presented (no ORs etc), nor do I think it should be as it is better to present the differences in biomarker values between those with and without hosp history (as is done in table 3). Also, there is still references to risk factors for hospitalization.

- Discussion – throughout the term hospitalization should have the word “prior” or “history of” inserted for clarity.

- Conclusions – the first sentence is not accurate – associations with history of hospitalization and fev were found – this was not a longitudinal study and therefore you cannot say that associations were found with disease progression. Similar comment to conclusions in the abstract.

- Table 3 – description and column headings should state prior hosp

- The authors state that a multivariable model was performed to identify the set of biomarkers most associated with FEV; they claim this is in Table 2, but in fact this is different than the model suggested. The paper would be enriched with this analysis but it is up to the authors whether to perform.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.