Reviewer's report

**Title:** Neutrophil Necrosis and Airway Inflammation in Lung Transplant Recipients with Cystic Fibrosis

**Version:** 1  **Date:** 17 April 2012

**Reviewer:** Patricia L Jackson

**Reviewer's report:**

Overall this was a very interesting article and a nice addition to the authors' previous work on annexin 1. They address the status of neutrophils in post lung transplant tracheobronchitis and present data consistent with altered neutrophil morphology, increased response to PMA stimulus, and show an increased presence of degraded annexin 1, presumably with loss of the anti-inflammatory N terminus. The work is limited by an absence of any data regarding patient drug regimen, and the authors do not address if the increased priming of circulating PMNs for necrosis could in any way be due to treatment. The authors can easily address this with a statement that the biological effects of treatments are either unknown or being considered. All other issues are minor, primarily editorial in nature. The title should be made more specific incorporating annexin 1 as this seems to be the main protein degradation product shown to be affected. There is a font change in the method section- subsections entitled “isolation of neutrophils and monocytes from peripheral blood and cell culture of neutrophils” appear to have different font or line spacing than the remaining manuscript. There are some spelling errors. In Figure 2 legend “meddle” should be middle. On Figure 5 “Ccontrol” should be control. In addition, for figure 4 and figure 5 some labeling was lost on printing due to the size of figure. The methods are well documented and appropriate for the work presented. In figure 1 the image shown for the neutrophils of CF BALF does not seem to represent the conclusions drawn in results p.9 and appears to be more like that of the LTX BR Asp than HS. The authors may consider a clearer image for that panel. Further work delineating the pathways leading the appearance of this early stage of neutrophil necrosis in the circulation and the effect on localized tissue inflammation, would broaden the scope of our understanding of post transplant disease processes and could potentially lead to new drug targets for inflammation, especially if the systemic effects are a result of a yet unidentified viral or fungal toxin.

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

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
'I declare that I have no competing interests'