Reviewer's report

Title: Protocadherin-1 is a glucocorticoid-responsive critical regulator of airway epithelial barrier function

Version: 4  Date: 27 April 2015

Reviewer: Pieter Hiemstra

Reviewer's report:

The authors have provided relevant replies to my comments. However, some issues remain.

Comments:

1. Lack of use of primary cells: please review the line in the discussion in which this is now discussed and correct it: … we could not transfect efficiently ….. Please also edit the way this is described as a limitation. In general, I suggest that all the new additions to the manuscript should be checked for the appropriate use of English language.

2. Polarity and differentiation. I do not agree with the statement that apical-basal polarity is the most important feature of epithelial differentiation. The cell lines used do not form cilia, goblet cells and club cells. Therefore, these can not be referred to as differentiated cells.

3. Diagnosis of asthma. If in all patients reversibility and/or airway hyperresponsiveness was assessed (as described in the GINA guidelines), this is correct. However, I do not understand the phrase “but not all”. Does that mean that these data were not obtained in all patients, and that therefore not all met the GINA guidelines? Please clarify.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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