Reviewer's report

Title: Characterization of Pseudomonas aeruginosa isolates in severe Chronic Obstructive Pulmonary Disease: the role of bronchiectasis

Version: 3
Date: 11 April 2014
Reviewer: Marc Miravitlles

Reviewer's report:

The authors present the results of an interesting study on the characterisation of the Pseudomonas (PA) infection in COPD and the presence of bronchiectasis. There are a few aspects of the work that can potentially be improved.

Line 43. In should be specified at what time point were the 41 isolations of PA obtained

Line 50. “in this subset…” which subset are the authors referring to?

Line 111. It is not clear why the authors excluded patients with known bronchiectasis from the study. It does not make much sense to exclude patients with known bronchiectasis from a study aimed to investigate their importance.

Line 120. The inclusion of patients with positive PA isolation the previous year is a possible source of bias. The authors should verify that the non-PA group also had sputum samples taken the previous year that were negative for PA.

Line 259. It is surprising the low number of sputum samples obtained in stable phase. This may have resulted in a very low incidence of PA colonisation, just because the number of samples was small. This has to be acknowledged as a limitation of the study. It is also remarkable that some 200 sputum samples were culture negative. This is in relationship with very strict criteria for colonisation (line 296)

Line 291. The number of courses of antibiotic was a factor significant in multivariate analysis, but it is not specified in which period of time.

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