Reviewer’s report

Title: Identification, prevalence and multidrug-resistance of Gram-negative organisms in Cystic Fibrosis: first 3-year study at a Centre in Southern Italy.

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Reviewer: Joseph Elborn

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This manuscript describes the identification and antibiotic resistance patterns of Gram negative organisms isolated from patients with cystic fibrosis in a regional referral centre in South Italy. The study does not address a particular hypothesis but simply describes the results of strains collected over a 2 year period. The methods used are appropriate for culture and identification of Burkholderia cepacia complex organisms. The authors make some conclusions about cross infection which would have been helped by having some molecular epidemiology data from the Stenotrophomonas maltophilia patients and those with Pseudomonas aeruginosa. There is considerably more debate on whether these organisms cause cross infection in cystic fibrosis, than for Burkholderia cepacia. The manuscripts presents the data in a logical fashion, though the discussion is only a couple of short paragraphs followed by a number of paragraphs under the heading of conclusions. These aren’t really conclusions but are a further part of the discussion.

Strength of the Study

This study reports an extensive collection of sputum samples from a full range of patients with cystic fibrosis. I suspect they have more data, particularly on phenotype and severity of the patients with CF. The methodologies for identification of genomovars is clearly described and appropriate.

Weaknesses of the Study

My main concern about this manuscript is that it is not really demonstrating any new insights into any of these infections. It is very descriptive and would be strengthened by some work on the epidemiology of Pseudomonas aeruginosa and Stenotrophomonas maltophilia infection in this clinic and by relating the cultures and the resistance patterns to outcomes such as lung function or indeed, survival.

Minor Points

The paragraphing is not terribly good in this manuscript. It would be much better presented as double spaced with paragraphs of appropriate length. Gram should be spelt with a capital G, although is repeated with a small G in the manuscript. There are a number of other typographical errors which the authors would do well to check.