Reviewer's report

Title: Actinobaculum schaalii - invasive pathogen or innocent bystander?: a retrospective observational study

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Reviewer: Val Hall

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Reviewer’s report for manuscript: Actinobaculum schaalii – invasive pathogen or innocent bystander?

This article interprets the likely clinical relevance and associations of Actinobaculum schaalii isolated from a series of clinical specimens. It is of interest because very little has been reported to date for this organism, which may be both under-reported and under-estimated as suggested by the authors.

The methods used are appropriate and it is pleasing to see that the isolates were identified by a reliable method (16S rRNA gene sequencing). The data are largely sound but reporting of blood culture isolates was unclear (see comment below). The conclusions are supported by the data. There are several minor grammatical errors.

However, this manuscript requires major revisions.

1) In ‘Background’ (main text and Abstract) the initial sentence is erroneous. A. schaalii did not ‘formerly belong to the species Actinomyces suis’. The organism was newly described in the referenced manuscript. Also, the derivation of its etymology is irrelevant in this MS.

2) Throughout the MS, the authors appear to confuse the term ‘isolate’ with ‘specimen or sample’. E.g. ‘40 isolates with detection of A. schaalii …’ and ‘Table 3: Isolates with detection of …’ this table is probably superfluous anyway.

3) In ‘Results’ the numbers of blood cultures sampled are confusing. For one patient results are listed as ‘F. magna from 2 of 2 and A.schaalii from 4 of 4 blood cultures’. Were 2 or 4 blood cultures drawn from this patient? The authors have not specified whether blood cultures were anaerobic or aerobic bottles and this may be highly relevant to the isolation rates (and may clarify the stated numbers).

4) In the same paragraph (and the Abstract) ‘… were polybacterial (all deep tissue samples, …’ ‘All’ should be replaced with numbers e.g. ‘7 of 7 deep tissue samples’.

Overall, the MS is too long and somewhat repetitive. I recommend that the results, discussion and conclusions are combined and that results are detailed either in tables or text but not in both.

Level of interest: An article whose findings are important to those with closely
related research interests

**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.