Reviewer's report

Title: High background rates of positive tuberculosis-specific interferon-gamma release assays in a low prevalence region of UK: a surveillance study

Version: 1 Date: 27 August 2012

Reviewer: Monica Losi

Reviewer's report:

Hinks and coworkers try to investigate a relevant clinical and epidemiological problem in the TB field: the background rate of positive INF- gamma assays in a low prevalence country.

The manuscript is well written, concise and report very interesting results.

Major compulsory Revisions

1. Figure 1: my personal suggestion is to add only bordeline in the figure; it sounds little be confusing write 3+ 1-, you might be discussed this in the results session.

2. Table 1: it seems better if you add the ethnicity for the Exposed Staff group, why not?

3. Pag 5 line 5-6: It seems reasonable if you add a possible explanation for the 10 indeterminate results with IFN-gamma assays in the unexposed patients group, e.g. association with immunosuppressive conditions or treatment or whatever else?

4. Pag 5 line 9: why you estimate 34 positive IGRA results attributable to exposure to the index case and not 44 as I understand in Table 1 or I confused data?

5. Pag. 5 line 14: check OR for IGRA-positivity associated with prior TB treatment in individuals without a recent exposure, you report OR 12 in Table 2.

6. The results should be discussed with some criticism; particularly, what about 9,5% positive IFN-gamma test in the group of unexposed Staff? Please, add in the discussion your explanation for this relevant data.

About a hypothetical positive IFN-gamma results caused by M. marinum or M. kansasii or M. szulgai, it seems to me not so arguable, you might to be discussed better.

7. References. please check more recent references.

Minor Essential Revisions
1. Pag. 2 line 16-17, Results:

2. Figure 1: check box 66 Died prior to testing.

3. Pag. 5 line 5-6: "in the negative wells" or simply "high background" instead of high background in the wells (n=2)

**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 interest