Reviewer’s report

Title: Risk factors of latent tuberculosis among asylum seekers in Switzerland: A cross-sectional study in Vaud County.

Version: 1 Date: 18 June 2012

Reviewer: Albert Nienhaus

Reviewer’s report:

In their cross-sectional study the authors report the results of TB-screening in Switzerland. 393 emigrants were screened, IGRA positive were 24.9% and 5 cases of active TB were diagnosed. In addition a score is developed which combines risk factors for active TB. The score is meant to identify emigrants with a high probability of a latent TB infection (LTBI). The number of IGRA needed for emigrant screening might be reduced if only those with a high score are screened.

The study is interesting and the results are important. However, the paper needs some improvements before it can be published.

1) The five cases with active TB should be better described: When was TB diagnosed, how was the IGRA result, age and gender, martial status etc. should be described. Would all 5 cases have been identified when the new score would have been used?

2) Please distinguish between statistically significant tests and those that are not significant.

3) Please describe the development of the score in the method section.

4) I’m not convinced that the score is useful. At least you should discuss simple approaches like screening all those from countries with a high incidence rate of TB or combining fewer variables like provenance and type of travel. To take martial status as a risk factor is somehow surprising.

5) The methods used in figure 3 and 4 should be explained in the method section.

6) It is surprising that cough is a risk factor for a positive IGRA. Please discuss whether this might have been caused by selection bias. Migrants with cough might be more likely to accept TB screening.

7) Please provide the distribution of the quantitative results of the t.spot.tb. Are they high or close to the cutoff?

8) The detection rate is quite high 5 out of 393. This would be about 1200 per 100,000. With such a high detection rate the program would be very successful and a score which reduces the number of migrants to be screened is unwanted.
Please discuss this issue.

9) It would be niche to discuss whether a short term preventive therapy would be useful.

Minor chances

10) Please use Former Soviet Republics: EX-URSS or Former Soviet Union FSU but not both.

11) Please control the literature list. Some citations seem to be incomplete. See reference one and six.

12) Page 3 first line second paragraph: consists of and not consist on
Sixth line: county instead of County
Last line: suspended instead of suppressed

13) Page 7: once it is x-ray and another time X-ray

14) Page 8, second line: period,

15) In the section Author’s contribution in the second line the “of” should be deleted.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests'