Reviewer's report

**Title:** Genetic variation of Mycobacterium tuberculosis circulating in Kharkiv Oblast, Ukraine

**Version:** 1  **Date:** 31 October 2010

**Reviewer:** Emanuele Pontali

**Reviewer's report:**

A careful review of English throughout the text is necessary.

**Summary:** Summary should be rewritten; in particular second sentence of first paragraph and first sentence of second paragraph. In first sentence of second paragraph: sum of percentages should 100.

**Sampling:** first paragraph should better clarify modality of enrollment; consecutive observed patients? convenient sample? representative of the patients followed up at that institution over time? referred from where? does this sampling create some limitation to this study?

**Results:** please review first paragraph because some results are not clear and some are apparently repeated.

**Determination of mutations...:** second paragraph to be rewritten for better clarity; at the end of the paragraph there is a single reference (nr 15): are there other reports to be cited?

**VNTR-typing:** unclear, probably to be re-written; in last paragraph it is not clear to which groups is made reference; the groups should also be better described

**Discussion:** when referring the first time to Nikolaev and Odessa it should be specified they are in Ukraine. When comparing results about LAM strain with Bulgaria and Kalinigrad, results from the study should be repeated here for better reading.

In paragraph starting with: 'we demonstrated an association between...': second sentence unclear, please re-write; what RF stands for? Last sentence of this paragraph states '...a clonal dissemination and increased transmission of this genotype': not possible conclusions given the observational nature of the study and given the selection of patients in the setting.

**Paragraph starting with 'We did not find a correlation...':** is very interesting and merits an elaboration.

**Paragraph starting with 'A study of M. tuberculossi genotypes...':** second sentence: the increase is in relation to what?

Please state the limitations of this study in the discussion

**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