Reviewer’s report

Title: Characteristics of pncA Mutations in Multidrug-resistant Tuberculosis in Taiwan

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Reviewer: Christophe SOLA

Reviewer’s report:

This paper (YC CHiu et al.) describes the characteristics of pncA mutations in MDR TB in Taiwan. Although it is technically sound it suffers some limitations:
- no presentation of genetic MDR-TB characteristics for rpoB and katG-inhA
- no comparison with pncA characteristics from fully susceptible isolates.

Hence the paper is a very preliminary report. There is indeed no scientific reason to separate genetic characterization of pncA from rpoB and katG-inhA genetic characterization. Was this done too?

Technical Issues points

- recommended critical concentration to discriminate between PZA susceptible to PZA resistant starts with 100 µg/ml, however higher cc are often used (300, 900). Please Justify the use of this unique cc.
- do not use millicentirgramme/ml this is not international MKSA system, use µg/ml.

Scientific Issue

- suggest in discussion hypothesis why MDR-TB isolates with concomitant PZA resistance were more likely to be sputum smear negative.
- explain in discussion why the sensitivity of the PZAse test is as low as 58,3% compared to 80-96% in other studies?

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: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests