

Development and validation of a nomogram predicting multidrug resistant tuberculosis risk in East China

My overall comments!

A) Abstract:

- 1) Overall written with good language,
- 2) The author needs to reduce the methodology section and increase the results section
- 3) Line 34-35 statement “Ten clinical traits and outcomes of laboratory tests for MDR 35 infections in patients with pulmonary tuberculosis were integrated into a nomogram that was created in our 36 study” in the conclusion seems a methodology and the authors need to revise the conclusion

B) Background: modestly fine but need language edition

- 1) Line 56-58: statement “Increasingly, researchers have reached a consensus on the importance of early 57 prediction and assessment of MDR-TB risk, with the most important step being to identify individuals at risk 58 of disease progression” need to be referenced
- 2) Line 64-67: statement “In clinical and previous studies, we found that symptoms such as fever and night sweats, imaging 65 manifestations of multiple lobar lesions, and some laboratory parameters (such as serum TB antibody, T cell 66 spot test (T-SPOT), C-reactive protein (CRP), albumin (Alb)) have proven to be valuable in predicting TB 67 activity and prognosis” need to be referenced

C) Materials and Methods

- 1) Sample size calculation has to be clearly indicated. The samples size considered in this study is quite small to draw conclusion
- 2) The “internal train sets and external test sets” has to be clearly indicated and definition of terms are important to easily follow up the methodology section

D) Results

- 1) Line 128-136: Section “Differences in Clinical Features between MDR-TB and TB” better if you provide clear table indicating the study participants characteristics and selected key factors

E) Discussion – Fine but the author needs to discussion their findings in comparison with other previous works

F) Conclusion

- 1) Line 272-275: the statement “For example, pay more attention to 273 immunocompromised patients by keeping balanced nutrition, engage reasonable exercise, develop healthy 274 lifestyle habits, and carry out immunotherapy to enhance immune function and lower the risk of MDR-TB 275 occurrence” shall be considered under limitation as the authors did not address it in this work

G) Overall, all, the manuscript is well written though it has several limitations and the finding are important. I am therefore in favor accepting the manuscript with minor revision