Dear. Kovy Arteaga-Livias
Editor
Microbial, infection and chemotherapy
Dear Kovy
Enclosed you will find the response to comments made by reviewers to the manuscript: New molecular mechanisms related to drug resistance in tuberculosis.
Thanks to the time spent by the reviewers for the evaluation of this document.
Best Regards
Roberto Zenteno Cuevas
ISP-UV
1. Relevance of the title to the content of the article
Remarks
2. Summary: Presents the general idea of the topic, objectives, research methods, results and conclusions, written in an objective and concise manner; and are found according to the maximum number of words per section.
Remarks
3. Introduction: Presentation of the subject, justification of the problem, objectives, hypotheses and methodological foundation, exposing the subject in an orderly and detailed manner
Remarks
4. Methodology: Describes the procedure, methods and techniques used in data collection and analysis.
Remarks
5. Ethical aspects. Does the manuscript have a paragraph on ethical aspects, where it mentions approval by the ethics committee, informed consent, and strict compliance with research ethics?

 $\mbox{R=}$  Yes the ethical statements related with this manuscript is placed in P8, line 168

6. Results: They are presented adequately and it is not redundant with tables or graphs shown.

#### Remarks

7. Discussion: They present a level of critical analysis in correspondence with the problem presented. Purposes of the article, scope, support theory and proposed methodological design.

# Remarks

8. Conclusions: Presents the author's inferences and teachings in relation to the investigated topic, it must correspond to the objectives of the study.

# Remark

9. References. Quality of bibliographic references and if they are in accordance with the Vancouver format.

### Remarks

10. Redaction. Is the manuscript correctly written? Does it contain any spelling or grammar mistakes?

#### Reviewer 2

WHO recommends the use of four drugs administered by a period of 4-6 months: isoniazid (INH), rifampicin (RIF), pyrazinamide (PZA), and ethambutol (EMB). When this first line fails, a second round of antibiotics is administered consisting on ethionamide, cycloserine, capreomycin, kanamycin, amikacin, oloxacin, levofloxavin, moxifloxacin, and para-aminosalicylic acid, among others (Table 1) (6). Since 2018, the WHO does not recommend the use of Km and Cm and recommends using the classification of drugs A, B, C for their selection and treatment.

The paragraph L45-46 and the information in table 1 was modified a) Mono-resistant (Mono-TB), resistant to only one of the first-line drugs; Review, monoresistant refers to a single drug in total of all d) Pre-extreme resistance (P-XDR-TB), is a multidrug resistance strain with additional resistance to a fluoroquinolone and a second-line injectable drug; and e) Extreme drug resistance (XDR-TB), is a pre-extreme resistance with additional resistance to at least one of the three second-line injectable anti-tuberculosis drugs. The definition of pre-xdr and xdr has already been modified by who 2020

The definitions were corrected according to the new recommendations. L47-53

Table 1 It is suggested to organize the drugs according to Group A, B or C to which they belong instead of indicating "first line" and "second line"

Organization of table was modified according to suggestion, and this was considered in the text also L44-45

Need to add Clofazimine, terizidone

Both antibiotics were included

Correct proteonamide for pretominad unless referring to ethionamide related proteonamide which also requires correction.

Corrected

Carbapenems and PAS need to be added

These drugs are now included in table 1

It is suggested to no longer include ciprofloxacin and ofloxacin

These drugs were removed