Overview
This article is an original epidemiologic study whose research question seeks to characterize the risk factors for multi-drug resistant tuberculosis (MDRTB) in a population of adult patients (with active pulmonary tuberculosis with available at a public hospital in Monterrey, Mexico. The investigation comes in the format of a retrospective case-control study and finds that use of illicit drugs / crack cocaine and/or previous treatment for tuberculosis are risk factors for the development of MDRTB.

Merits
The abstract adequately summarizes the work, detailing succinctly the motivation for the research, the research aim, the methods in brief used to conduct the study, and an outlay of results of statistical analysis and conclusions reached. Previous studies listed in the references make the case for conducting such a study, as a dearth of information exists regarding regional individual risk factors. The case-control study design accommodates rare outcomes, such as MDRTB, compared to normal tuberculosis, and was quick to reach completion, as the one year duration of the study implies. The study was conducted among patients who had drug susceptibility results available for their TB; each case (n = 25) had approximately three controls (n = 70), for a total of n = 95. An advantage of case-control lies in the requirement for fewer observations. Possible risk factors were compiled using a series of bivariate tests of association to uncover ‘crude risk factors,’ followed by a multivariate logistic regression to select for the most significant risk factors. The results are presented clearly over three tables; Table 1 describes the resistance profiles of the drug-resistant tuberculosis among the cases, Table 2 describes the crude risk factors for MDRTB resistance, while Table 3 outlines the predictors of MDRTB revealed through multivariate logistic regression.
**Critique & Comments to Author**

Overall, the research question and abstract are sound, and represent a valuable contribution to the literature regarding risk factors for individual susceptibility to MDRTB with a regional focus. However, several issues are worthy of the author’s attention; they will be presented item-by-item, and be paginated to simplify the response process.

p. 771: This is a minor comment, but in the methods or introduction one should stipulate the definition of the adult population, as different nations/disciplines use different standards.

p. 771: Case-control studies are prone to selection bias. How does this study address the potential for this bias, especially when all subjects are recruited from the same hospital setting?

p. 772: Although it is stated that individuals who declined enrollment did not differ from the participants, there is no evidence in favor of or against this statement, and is hard to judge whether or not this is true based off the evidence presented. What evidence is there to corroborate this statement?

p. 772: It would be helpful, but not essential, to know which MDRTB cases were also primary/secondary cases.

p. 772: The HIV seropositivity data is more than a decade old; what evidence is there to demonstrate that the epidemic curve has not significantly changed?

p. 772: What was the purpose of ascertaining ancestry through single nucleotide polymorphisms? It seems that more substantive testing with regard to disease pathology could have been performed.

p. 772-773: If pyrazinamide susceptibility was unavailable for individual monoresistance, what was the purpose of putting it in Table 1? It is misleading and makes it look as if there is zero resistance to pyrazinamide, which we know is not the case.