

Revisor 1**Open Review**

- ☐ I would not like to sign my review report
☒ I would like to sign my review report

Quality of English Language

- ☒ I am not qualified to assess the quality of English in this paper
☐ English very difficult to understand/incomprehensible
☐ Extensive editing of English language required
☐ Moderate editing of English language required
☐ Minor editing of English language required
☐ English language fine. No issues detected

	Yes	Can be improved	Must be improved	Not applicable
Does the introduction provide sufficient background and include all relevant references?	☒	☐	☐	☐
Are all the cited references relevant to the research?	☒	☐	☐	☐
Is the research design appropriate?	☒	☐	☐	☐
Are the methods adequately described?	☐	☒	☐	☐
Are the results clearly presented?	☒	☐	☐	☐
Are the conclusions supported by the results?	☒	☐	☐	☐

Comments and Suggestions for Authors

I would like to extend my gratitude to the authors for their hard work in revising the manuscript. This has allowed them to present the results more clearly.

While I am satisfied with their answers to my questions, I feel that section 2.8, "Statistical Analysis", could be shortened further. It would be sufficient to describe the methods used for statistical analysis and the specific steps taken to perform them. In my opinion, a detailed description of the statistical analysis methods is not necessary for this audience.

2.8 Statistical Analysis

The study utilized a range of statistical methods to analyze data comprehensively. This included chi-square tests, Mann-Whitney tests, Pearson's Chi-Square test, and descriptive measures like median, interquartile range, absolute frequency, and percentages. Chi-square tests were employed to investigate associations between categorical variables, providing insights into potential relationships within the data. The Shapiro-Wilk test was used to assess the normality of data distribution, which led to the application of Mann-Whitney tests when normality assumptions were not met, specifically for comparing medians of two independent samples. Linear regression analysis was utilized to model the relationships between dependent and independent variables. This involved estimating regression coefficients and standardized coefficients to evaluate the impact of independent variables while controlling for other factors. Standard errors were calculated to gauge the variability of regression coefficients, and T-statistics were used to test the statistical significance of these coefficients. The coefficient of determination (R^2) and adjusted R^2 were computed to assess the explanatory power of the model and correct for model complexity, respectively. The Variance Inflation Factor (VIF) was used to detect multicollinearity among independent variables. Furthermore, Receiver Operating Characteristic (ROC) curves were employed to evaluate the performance of binary classification models, with Youden's method aiding in determining optimal cutoff points. Diagnostic accuracy metrics such as Sensitivity, Specificity, Positive Predictive Value (PPV), Negative Predictive Value (NPV), Overall Accuracy, and Diagnostic Odds Ratio were calculated to evaluate the quality of chosen cutoff points and overall model performance. All statistical analyses were conducted using the R programming environment (version 4.2.3), with a significance level of 5% applied to all hypothesis tests.

Please check lines 425-428 and 429-430 to ensure this is not a repetition.

ok