

# Review of: "A Graphical User Interface Based on Logistic Regression Approach for Malarial Detection"

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**Potential competing interests:** No potential competing interests to declare.

The paper is interesting and potentially relevant to predicting malaria incidence. Fig 2 is an excellent schematic and very clearly written. It would be nice to include some practical examples of how the best model (logistic regression) might be used to predict and hence combat malaria?

Specific notes, generally of a minor nature

1. Species names should be presented in italics: *P.falciparum*, *P.vivax*, *P.malariae*, *P.ovale*, and *P.knowlesi*

2 "However, malaria is preventable and curable ..."

*It might be more realistic to write*

" However, malaria is *potentially* preventable and curable

3 "...reports that an area is disease-endemic if its  $R_0 > 1$ "

*Better as:*

"...reports that an area is disease-endemic if its  $R_0 > 1$  "

4 "Interestingly,  $R_0$  deduces socioeconomic determinants "

*Clearer as:*

"Interestingly,  $R_0$  is related to socioeconomic determinants"

5 "SVM, DT, RF, "

At first mention in the text, please spell out the abbreviations

NB LR, SVM, and RF are spelled out in the abstract, and probably this does not need to be repeated

6 " The study [14] performed an experimental analysis of different machine learning strategies to detect malaria "

This does not read well. Either identify the authors or put the reference at the end of the sentence.

7 What is the "for the **PTB** outcome"? PTB does not appear to have been defined.

8 “i.e., bit changes in the training sample, DT structure highly changes. Do you mean “ bit changes in the training samples lead to large changes in the DT structure”?”

9 “it avoids a similar act from the trees” Does this mean it avoids similar results which would be better amalgamated or not distinguished in the first place?

10 “it is noticed that logistic regression carries out better amongst all”

*Better might be:*

“it is noted that logistic regression performed better than the other approaches..”

11 “The data used in this research is very less “

*Better:*

“The data used in this research is very sparse.”