

Review of: "Implementing Machine Learning to predict the 10-year risk of Cardiovascular Disease"

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Potential competing interests: No potential competing interests to declare.

The overall quality of this research is commendable, marked by a well-crafted, organized, and structured narrative. The study delves into the global prominence of Cardiovascular Disease (CVD) as the primary cause of mortality, emphasizing the pressing need for precise risk prediction models that facilitate early intervention and preventive measures. The primary objective of this research project was to develop a Machine Learning (ML) model geared towards predicting the 10-year risk of CVD.

Should the revised paper be approved for publication, there are certain concerns that warrant attention, as outlined below:

1-Revise the abstract to clearly indicate that this manuscript is a survey paper. The abstract should have a structured format with a well-defined problem statement, objectives, methodology, results, and a link to your code.

2-Incorporate a summarization table into the related work section. This table should encompass each machine learning technique, its corresponding reference, the dataset used, and its performance metrics.

3-Enhance the clarity of your contributions. Make sure they are explicitly articulated.

Include a comparison of your methodology with state-of-the-art techniques in the manuscript.

4-Provide the full forms of abbreviations the first time they are used and maintain consistency in their usage throughout the manuscript.

5-Clearly label the axes in your figures.

6-Incorporate recent research findings into your work.

7-Define acronyms such as FRS, DHP, and RSCV.

8-Consider (optional) applying ensembling techniques or automated machine learning (AutoML) methods to improve accuracy and enable generalization across various heart disease datasets.