

# 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 paper focuses on developing a Machine Learning model to predict 10-year Cardiovascular Disease (CVD) risk. It reviews existing literature, evaluates models, and uses the UCI Heart dataset for training. The research aims to enhance preventive strategies and interventions.

The introduction section clearly presents the context of the research problem. It starts by emphasizing that Cardiovascular Disease (CVD) is the leading cause of global death, providing relevant statistics about the impact of CVD. It then points out the limitations of traditional models for predicting CVD risk, making room for the introduction of Machine Learning (ML) approaches. The text also mentions previous studies that have demonstrated the effectiveness of these ML models compared to traditional methods.

The described study aims to develop an ML-based model to predict CVD risk over a period of 10 years. To do this, the authors conducted a comprehensive review of existing literature, comparing traditional methods and models with those based on ML. They highlight the importance of ML approaches in improving CVD risk prediction and identify gaps in current research.

In conclusion, the text underscores the study's contribution to the growing body of research on CVD risk prediction using ML, indicating that this could have a positive impact on clinical decision-making and patient outcomes.

The findings underscore limitations of traditional models and emphasize the potential of ML for enhanced CVD risk prediction, though acknowledging study limitations. Future research should focus on diverse datasets, integration of additional factors, ensemble models, explainability techniques, and prospective clinical validation to revolutionize CVD risk assessment and preventive strategies.