# Article information:

Study of cardiovascular disease prediction model based on random forest in eastern China | Scientific Reports  
<https://www.nature.com/articles/s41598-020-62133-5>

# Article summary:

1. Cardiovascular disease (CVD) is a major health issue in China, with over 290 million cases and 4.344 million deaths in 2016.

2. This study conducted a CVD prediction model research based on a specific culture, lifestyle, behavior and genetic background in eastern China, using the RF algorithm based on classification and regression tree (CART).

3. The study included 25231 subjects with high-risk CVD from 101056 people in Zhejiang province, who were followed up regularly to collect cardiovascular events through an electronic health record (EHR) system.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article provides an overview of the study of cardiovascular disease prediction model based on random forest in eastern China. The article is well written and provides detailed information about the study design, population selection criteria, data collection methods and follow-up procedures used for the study. The authors have also provided sufficient evidence to support their claims regarding the prevalence of CVD in China and its associated burden on society.

However, there are some potential biases that should be noted when evaluating this article. Firstly, the authors have not discussed any possible risks associated with using machine learning algorithms such as random forest for predicting CVD risk. Secondly, the authors have not presented both sides equally when discussing multivariable regression models versus machine learning models for predicting CVD risk; they have only discussed the advantages of machine learning models without exploring any potential drawbacks or counterarguments. Finally, there is no mention of any promotional content or partiality in the article which could potentially influence readers’ opinions about the results of this study.

In conclusion, while this article provides a comprehensive overview of a study conducted to predict CVD risk using random forest algorithms in eastern China, it does not address some important issues such as potential risks associated with using machine learning algorithms or presenting both sides equally when discussing different prediction models for CVD risk assessment.

# Topics for further research:

* Potential risks of machine learning algorithms
* Multivariable regression models for CVD risk prediction
* Advantages and disadvantages of machine learning models
* Bias in machine learning algorithms
* Promotional content in CVD risk prediction studies
* Partiality in CVD risk prediction studies

# Report location:

<https://www.fullpicture.app/item/2f9677d97f5337d81fd1482b68eb3f59>