Reviewer’s report

Title: Coronary Heart Disease and Mortality Following a Breast Cancer Diagnosis

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Reviewer: Ruoqi Liu

Reviewer's report:

The study examines the independent and joint effects of CVH and cancer treatments on CHD and mortality via statistical analysis and machine learning techniques. While the topic is significant and the experiments are comprehensive, the paper needs some improvements.

1. The methodology part:

   - How to represent the features for each patient in the machine learning prediction model? What's the dimension of the feature vectors in this framework?

   - How to represent the interaction of CVH and treatment as the features in the model (i.e., directly concatenate or take average)? Please illustrate how do you preprocess and construct these features.

2. The experiment part:

   - The explanation and analysis of results in Table 3 and Figure 3 are not sufficient. How do these results contribute to your study purpose (the examination of independent & joint effects of CVH and treatments)? The higher accuracy of CVH+treatment than only using one single feature is highly likely because more information is used to train the model. Please highlight the indication lies behind the results.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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