Review of: "EOESGC: Predicting miRNA−disease Associations Based on Embedding of Embedding and Simplified Graph Convolutional Network"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Identifying miRNA-disease association is an important task because they are extensively involved in biological processes, and their interactions play a vital role in gene regulation. In this manuscript, the authors proposed a deep learning model called EOESGC for miRNA-disease prediction. The model fuses the disease similarity, miRNA similarity and miRNA-disease association. In particular, the embedding of embedding model (EOE) and simplified graph convolutional network (SGC) are used to extract nodes representation. The contributions of the proposed model were validated by the comparison with relevant state-of-the-art methods in this research area over public dataset. However, I still have several comments for the authors before publication.

(1) The introduction or the discussion section is to be enriched with the most recent and relevant models particularly 2020 and 2021 for miRNA-disease association prediction.

(2) Page 5 and page 7. In Eq 1and In Eq 11, The authors use a free parameter scaling factor Alpha to adjust the disease similarities and miRNA similarities. What's the value range of Alpha? and what's the values are in this article? How alpha effects prediction?

(3) Page 5 and page 7. In Eq 2 and In Eq 12, for miRNA similarity and disease similarity, the authors set thresholds h to remove some low similarities. The author should describe the range of values for this threshold h and what the value is in this article.

(4) Page 10, In Eq 24, The authors use a free parameter step size K to adjust the operation. What's the value of K? Authors need to analyze effects of changing these parameters.

(5) I suggest that the author add a section "Experimental settings" to discuss the parameter settings and the experimental environment of the EOESGC model.

(6) You should revise your English writing carefully and eliminate small errors in the paper to make the paper easier to understand. For example, page 2, 1st paragraph

"Nowdays" --> "Nowadays". "Firstly, three models based on variational autoencoders are introduced." This sentence appeared twice in a row.

(7) Please provide the data and code of the algorithm in GitHub, given the high complexity of the method.