

Review of: "In Silico Investigation of Potential COVID-19-Associated MicroRNA Signatures"

Junaidi Khotib¹

¹ Universitas Airlangga

Potential competing interests: No potential competing interests to declare.

The reviewer has read and thoroughly reviewed the manuscript "In silico investigation of Potential COVID-19-Associated MicroRNA Signatures". The manuscript discusses the importance of discussing this topic, approach methods, in silico results, and discussion along with its impact. There are important notes related to in silico studies, which appear below:

1. This in silico study covers extensive matters related to miRNAs involved in developing diseases related to SAR-CoV-2 infection. For this reason, the author must focus on specific proteins and genes that are dominantly responsible for responding to SAR-CoV-2 virus infection.
2. The manuscript still needs to show a measurable functional impact due to in silico studies. There, it only shows the proportion of the number of genes involved in each pathway.
3. The author must write the terminology of SAR-COV-2, Coronavirus, and COVID-19 consistently and precisely. In the manuscript, there are many incorrect choices.
4. Authors must be consistent in writing miRNA. Some parts of the script use microRNA.
5. Writing citations for statements in the manuscript from several references should be arranged based on year.
6. This study concluded that many genes in the pathway are involved, called "co-regulation," and the outcome resulting from "co-target." This terminology is undoubtedly not scientifically correct because the pathway occurs by forming a cascade or parallel of various stimuli, which impact an additive response. The author must correct and choose the right terms.
7. The author must use a functional pathway that is dominantly involved and correct the term "over-represented" in Figure 2.
8. IL 10 is expressed increased in conditions of COVID-19 infection compared to controls. The author must explain how IL-10, which has anti-inflammatory properties, can increase this infection. Likewise, IL 6 does not change in conditions of infection.