Review of: "Design and Molecular Screening of Various Compounds by Molecular Docking as BACE-1 Inhibitors"

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Potential competing interests: No potential competing interests to declare.

The authors have a good research topic, “Design and Molecular Screening of Various Compounds by Molecular Docking as BACE-1 Inhibitors,” in which they designed a drug against Alzheimer’s disease. However, the following points should be taken into consideration and addressed:

1. The title does not explain the main idea of the research manuscript. It should be changed to reflect the research, which involves designing a drug candidate for Alzheimer's.
2. In the abstract, “Beta Secretase Amyloid Cleaving Enzyme, or BACE-1, also known as β-secretase, is one of the major drug targets for the treatment of Alzheimer’s disease. Molecular docking was performed with modified compounds derived from flavonoids (Quercetin, Myricetin & Baicalein), ferulic acid, and donepezil with the BACE-1 protein.” What is the correlation of BACE-1 and flavonoids? This should be mentioned, and the abstract needs to be revised.
3. Is this a review or a research article? The authors need to clarify this confusion, as the research manuscript does not include subheadings in the introduction or any literature review like a thesis.
4. Again, the aims and objectives heading is not needed. The whole introduction needs to be revised and should follow typical manuscript guidelines.
5. In the materials and methods section, the numbering is totally wrong, and the headings are poorly made. There is no junction between any steps mentioned in the methodology.
6. In the results and discussion, heading 5.1 is totally missing.
7. The conclusion is too long, and it should discuss the future aspects, the main outcome, and the applications of your research.
8. There is no junction between any headings or results.
9. Please go through the following drug design articles in order to follow the pattern.

- Revolutionizing treatment for toxic shock syndrome with engineered super chromones to combat antibiotic-resistant Staphylococcus aureus
- Naveed, M.; Shabbir, M.A.; Ain, N.-u.; Javed, K.; Mahmood, S.; Aziz, T.; Khan, A.A.; Nabi, G.; Shahzad, M.; Alharbi, M.E.; et al. Chain-Engineering-Based De Novo Drug Design against MPXVgp169 Virulent Protein of Monkeypox Virus: A Molecular Modification Approach. *Bioengineering* **2023**, *10*, 11. https://doi.org/10.3390/bioengineering10010011
- Halogens engineering-based design of agonists for boosting expression of frataxin protein in Friedreich’s ataxia

Overall review:

The authors should follow the typical guidelines and should go through several in silico-based drug designing articles to follow the pattern of a publication. The manuscript does not appear to be a thesis/manuscript or review article. A lot of work is required to convert this great research into a publishable article.