Review of: "Design, Synthesis, and In-Silico Analysis of Thiazole-Embedded Schiff Base Derivatives for Breast Cancer Therapeutic Potential"

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Potential competing interests: No potential competing interests to declare.

Dear Peer Review Team, Qeios!

I value the opportunity to contribute to this article. The text body provides our opinions, which were restricted to the scientific findings of the investigation.

I have some observations regarding the work "Design, Synthesis, and In-Silico Analysis of Thiazole-Embedded Schiff Base Derivatives for Breast Cancer Therapeutic Potential" that was submitted to Qeios by Maher Afroj Khanam, Ranajit Kumar Sutradhar, Ashutosh Nath, Mamiya Chowdhury, Keya Rani Dutta, and Sanjay Belowar. Overall, the work's main idea is sound and valuable.

The paper offers ideas for potential compounds that might be used to treat breast cancer. The synthesis structure analysis and the summary satisfy the requirements for a good description. The following factors could be taken into account by the writers in order for the essay to succeed:

- Although the in silico analyses may not provide precise cell tests, they provide a prototype of chemical docking with target proteins. I propose that in vitro tests be conducted using the most promising compounds listed (TZ6, TZ7, and TZ8, for instance) in animal cells to examine cytotoxicity, haemolytic activity, nitric oxide levels, mitochondrial activity, and plasma membrane permeability in order to strengthen the study. The proteins and hormones the study focuses on should be supplemented with these elements. As a result, testing in cancer cells with a reanalysis of all parameters should be conducted. Lastly, they should run the last in silico test to validate the results. The work will be more replicable and data secure in this way.
- The produced substances are contrasted with anticancer medications. The only studies that compare it are molecular docking studies. The ADMET readings must be contrasted with those of conventional anticancer medications.
- For the study to be regarded as theoretical, it is recommended that the authors make clear whether the chemicals of the study may be included via synthesis or if the synthetic portion can be eliminated.
- It should be more obvious which substituents were used to create thiosemicarbazone. For greater clarity, the thiosemicarbazone preparation figures may be provided.

In conclusion, considering the importance of the problem, the journal, and the essay's general presentation, I recommend

the paper with a few minor changes.

Best regards,

Nguyen Minh Quang