

Review Form 1.7

Journal Name:	Asian Journal of Biotechnology and Genetic Engineering
Manuscript Number:	Ms_AJBGE_110809
Title of the Manuscript:	In Silico Analysis and Molecular Docking Studies of Potential Adenylyl Cyclase Type 2 Inhibitors Using Oleandrin Glycosides
Type of the Article	

Review Form 1.7

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide</p>	<p>The manuscript is scientifically significant as it investigates oleandrin's capability as an Adenylyl Cyclase Type 2 (ADCY2) inhibitor for cancer treatment using computational methods like molecular docking. This exploration proposes a novel approach to target ADCY2 in cancer therapy, highlighting natural compounds as potential alternatives to conventional chemotherapy, potentially offering treatments with reduced side effects. By employing computational drug discovery techniques, this study provides valuable insights into potential therapeutic pathways, showcasing its relevance in advancing strategies for cancer treatment.</p> <p>Maybe, but you could use this title instead., "Computational Exploration of Adenylyl Cyclase Type 2 Inhibition by Oleandrin Glycosides: In-Silico Analysis and Molecular Docking Studies"</p> <p>YES</p> <p>Overall, While the manuscript structure is adequate, refining the Materials and Methods section by providing more detailed procedural information and organizing the Results and Discussion sections into clearer subsections would further enhance the manuscript's readability and accessibility for readers.</p> <p>Methodology Clarity: The Methods section could be more detailed, particularly in explaining the specific steps taken in ligand preparation, target and ligand optimization, and parameters used in the computational analysis. Detailed information on the algorithms, scoring functions, and parameters employed during molecular docking could enhance the clarity of the methodology.</p> <p>Results Interpretation: While the manuscript indicates successful molecular docking with strong binding affinity between oleandrin and ADCY2, additional information on the validation of the docking results or comparisons with known interactions might provide stronger support for the conclusions drawn.</p> <p>Discussion Depth: The Discussion section could elaborate further on the implications of the findings, potential limitations of the study, and future research directions. Specific details on how oleandrin's binding to ADCY2 relates to its potential as an anticancer agent could strengthen the discussion.</p> <p>Clarity and Structure: The manuscript's organization and clarity could be improved by structuring the Results and Discussion sections into subsections that focus on specific findings, analyses, and interpretations.</p> <p>The references provided offer a comprehensive range of sources, including studies on DNA methylation's role in cancer (references [1]-[8]), oleandrin's pharmacological and toxicological aspects ([10]-[11]), and computational approaches in drug</p>	

Review Form 1.7

<p>additional suggestions/comments</p>	<p>discovery ([12]-[14]). The references encompass diverse aspects, supporting the manuscript's scientific content. However, to enhance the manuscript's depth and recentness, here are additional references that might be considered:</p> <ol style="list-style-type: none"> 1. Recent Studies on ADCY2 in Cancer: Look for studies exploring ADCY2's role in various cancer types or its potential as a therapeutic target published in the last few years. 2. Current Research on Natural Compounds and Cancer: Consider recent publications discussing natural compounds' anticancer properties or their interactions with specific cancer-related targets. 3. Advances in Computational Drug Discovery: Explore recent articles highlighting advancements or novel methodologies in computational drug discovery and molecular docking techniques. <p>Adding recent references (published within the last 2-3 years) could strengthen the manuscript's current relevance and support the latest advancements in the field.</p> <p>additional suggestions/comments Strengths:</p> <ol style="list-style-type: none"> 1. The manuscript addresses an important topic regarding the potential of oleandrin as an ADCY2 inhibitor in cancer treatment. 2. It provides a comprehensive overview of the methods used in molecular docking analysis and their implications in cancer research. 3. The discussion covers the significance of the findings and suggests potential future directions for research. <p>Areas for Improvement:</p> <ol style="list-style-type: none"> 1. The manuscript could benefit from clearer articulation of the methodology used for molecular docking and analysis. 2. Grammar and language quality need improvement for clarity and precision. 3. The ethical considerations and competing interest disclosures need to be explicitly addressed. 	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> 1. Is language/English quality of the article suitable for scholarly communications? 	<ol style="list-style-type: none"> 1. Inconsistencies in sentence structures and use of technical terms. 2. Lack of clarity in some sentences due to convoluted phrasing. 3. Incorrect word choices or phrases that could be more concise. 4. Missing or inconsistent punctuation marks. 5. Use of passive voice in certain sentences that could be rewritten in active voice for clarity. 6. Terminology repetition and unclear references in some parts of the text. 7. Fragmented sentences or phrases that could be merged for better readability. 8. Grammatical inconsistencies in tense usage within sentences. 	
<p>Optional/General comments</p>	<p>The provided text includes various technical details and terminologies relevant to molecular docking and cancer treatment. It's important to ensure consistency in terminologies, sentence structure, and clarity throughout the document. Additionally, the text could benefit from simplification in some parts to enhance readability without losing the scientific essence. Moreover, attention to grammatical consistency, including verb tenses, and better organization of complex ideas will further improve the manuscript's clarity and scholarly appeal.</p>	

Review Form 1.7

PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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