

[Review Form2](#)

Book Name:	<a href="#">Contemporary Research and Perspectives in Biological Science</a>
Manuscript Number:	Ms_BPR_2896
Title of the Manuscript:	TOPOLOGICAL AND STATISTICAL METHODS FOR QSPR MODELING OF INNOVATIVE DRUGS FOR LUMPY SKIN DISEASE
Type of the Article	Book chapter

**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p><b>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</b></p>	<p>Significant for the scientific community as it addresses a pressing issue in veterinary medicine and drug development. By leveraging quantitative structure-activity relationship (QSAR) approaches, the study offers insights into the design and optimization of novel therapeutic agents for lumpy skin disease, which affects livestock and poses economic challenges.</p> <p>Importance:</p> <ol style="list-style-type: none"> <li><b>Innovative Approach:</b> The integration of topological and statistical methods in drug design provides a systematic framework for predicting the efficacy of new compounds, which could accelerate the discovery process.</li> <li><b>Relevance to Public Health:</b> Addressing diseases like lumpy skin disease is crucial for livestock health and food security, making this research relevant to both veterinary and agricultural sectors.</li> <li><b>Methodological Advancement:</b> The focus on advanced modeling techniques may encourage further research in computational drug design, fostering innovation in related fields.</li> </ol> <p>Personal Reflection:</p> <p>I appreciate this manuscript for its application of sophisticated modeling techniques in a practical context. The potential to enhance drug discovery through computational methods is exciting, and the study contributes valuable knowledge to both the scientific community and industry practitioners. However, I would recommend a more detailed explanation of the methodologies used, as this could further enhance the manuscript's accessibility and impact.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>The title is quite suitable, as it clearly conveys the main focus of the study.</p>	

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<p><b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b></p>	<p>The abstract provides a clear overview of the study's context, objectives, methods, and significance. However, there are areas where it could be improved for clarity and completeness.</p> <p>Strengths:</p> <ol style="list-style-type: none"> <li><b>Contextualization:</b> It effectively introduces lumpy skin disease (LSD) and the need for new therapeutic approaches.</li> <li><b>Methodology:</b> The mention of QSPR modeling and topological indices highlights the innovative nature of the research.</li> <li><b>Outcomes:</b> It notes the intended impact on drug discovery for LSD treatment.</li> </ol> <p>Suggestions for Improvement:</p> <ol style="list-style-type: none"> <li><b>Specificity in Results:</b> While the abstract mentions the effectiveness of topological index-based QSPR modeling, including specific outcomes or metrics (e.g., accuracy rates, computational efficiency improvements) would enhance credibility and interest.</li> <li><b>Clarification of Novelty:</b> A brief statement about how the proposed approach differs from or improves upon existing methods would add value. For example, mentioning if the approach allows for a faster or more accurate identification of candidates would emphasize innovation.</li> <li><b>Broader Implications:</b> Including a sentence about the potential broader implications of successful treatments for LSD (e.g., economic impacts, animal welfare) could underscore the significance of the research.</li> <li><b>Technical Terminology:</b> Ensure that the abstract remains accessible; consider briefly explaining what "topological indices" are for readers unfamiliar with the term.</li> </ol>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p><b>Yes</b></p>	
<p><b>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</b></p>	<p>This manuscript is scientifically robust and technically sound for several reasons. Firstly, it presents a well-structured integration of computational chemistry methods, particularly QSPR modeling, to address a significant veterinary issue—Lumpy Skin Disease (LSD). The manuscript effectively leverages topological indices to predict drug properties, which are mathematically defined and widely used in cheminformatics, demonstrating the rigor in methodology. The study is grounded in an established scientific framework, citing foundational works like Hansch and Fujita's QSPR model and more recent applications of machine learning, ensuring it builds upon credible scientific developments.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p><b>yes</b></p>	
<p><u>Minor</u> REVISION comments</p>		
<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>yes</p>	
<p><u>Optional/General</u> comments</p>	<p>NA</p>	

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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <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>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes. Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>Najwa Adam Mhmoud Juda</b>
Department, University & Country	<b>University of Khartoum, Sudan</b>