

Review Form 3

Journal Name:	Advances in Research
Manuscript Number:	Ms_AIR_125074
Title of the Manuscript:	Zebrafish: a versatile experimental model for application in toxicological research
Type of the Article	Minireview Article

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>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.</p>	<p>The manuscript entitled "Zebrafish: A versatile experimental model for use in toxicological research". is invaluable to the scientific community due to its comprehensive review of zebrafish (Danio rerio) use in toxicology. This species has proved to be a relevant alternative to traditional mammalian models, offering advantages such as rapid development, genetic homology with humans, and ethical considerations aligned with the 3R principles (Reduction, Refinement, Replacement) in the field of research. The extensive literature review highlights the strengths and limitations of zebrafish use, guiding future research directions and toxicology study methodologies.</p> <p>This manuscript is appreciated for its clarity and depth of analysis. It synthesizes existing research while highlighting the growing importance of zebrafish in toxicology, making it an invaluable resource for researchers in this field. In addition, discussing prospects for zebrafish applications suggests promising avenues for further exploration, reinforcing its relevance in modern scientific research.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title "Zebrafish: a versatile experimental model for application in toxicological research" is judicious as it accurately reflects the manuscript's focus on the use of zebrafish in toxicology. However, it could be more engaging and specific to improve clarity and attract readers. An alternative title could be "Harnessing zebrafish as a model organism: Advances and Applications in Toxicological Research."</p> <p>This revision emphasizes the dynamic process of using zebrafish while highlighting advances and practical applications in toxicology.</p>	
<p>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.</p>	<p>The abstract exposes the relevance of the zebrafish as a model in toxicological research, emphasizing its advantages, such as a sequenced genome, anatomical similarities with mammals, high fecundity, rapid embryonic development, and low maintenance costs. For greater clarity and completeness, it should specify the objectives of the literature review, explicitly mentioning key toxicological areas such as neurotoxicity, hepatotoxicity, and cardiotoxicity. In addition, summarizing the main findings would give readers a clearer idea of the full article. Reducing redundancy in the discussion of zebrafish benefits would improve the article's brevity and maintain reader interest. Finally, incorporating potential future applications of zebrafish in toxicology could enhance the relevance of the abstract and pique the reader's interest in the subject.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript is well-structured and effectively communicates objectives and results, focusing on the zebrafish as an experimental model in toxicological research. It has transparent sections, including Introduction, Methodology, Results, and Discussion, which facilitate understanding. The division of Results and Discussion into subsections, such as Advantages versus Limitations and Applications in Toxicology Studies, enhances clarity. A Future Prospects section highlights potential for future research. However, expanding the conclusion to summarize key findings could reinforce zebrafish's importance in toxicological research.</p>	
<p>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.</p>	<p>The manuscript demonstrates scientific robustness and technical soundness through a comprehensive literature review and well-supported claims regarding the use of zebrafish in toxicological research. The authors provide a thorough overview of the benefits and limitations of using zebrafish, backed up by many references to recent studies, reinforcing the credibility of their findings. In addition, the methodology section describes a systematic approach to selecting relevant literature, ensuring that the review is based on high-quality sources. Including specific examples of zebrafish applications in various toxicological studies further illustrates its versatility as a model organism. Overall, the manuscript effectively integrates historical background, current applications, and future prospects, making it a valuable contribution to the field of toxicology.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The references in the manuscript are sufficient and predominantly recent, covering a range of studies that support the claims made for the zebrafish as a model organism in toxicological research. Including papers from the last ten years (2014-2024) indicates a focus on current research, a crucial factor in ensuring relevance in the rapidly advancing discipline of toxicology.</p>	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The English language drafting style of the manuscript is in line with scientific writing, with clear, coherent, and structured writing. It uses scientific terminology and can be improved by breaking up long sentences for better readability.	
Optional/General comments	The manuscript entitled "Zebrafish: a versatile experimental model for application in toxicological research" presents several strong points in favor of its acceptance. Firstly, it offers a comprehensive overview of the use of zebrafish in toxicology, detailing its advantages, limitations, and diverse applications, which is invaluable to researchers and practitioners in this field. The precise structure of the manuscript, organized into distinct sections such as introduction, methodology, results and discussion, and conclusion, enhances navigation and comprehension, allowing each section to build logically on the previous one. Finally, including recent references reinforces the relevance of the results and ensures that the manuscript reflects current trends and advances in toxicological research.	

PART 2:

	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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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