

Review Form 2

Book Name:	Recent Developments in Chemistry and Biochemistry Research
Manuscript Number:	Ms_BPR_2859
Title of the Manuscript:	Sex-Dependent Effects of Aristolochic Acid on Kidney Injury in Mice
Type of the Article	Book chapter

PART 1: Review Comments

<u>Compulsory</u> 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)
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.	This manuscript holds significant value for the scientific community as it provides critical insights into sex-based disparities in acute kidney injury (AKI) induced by aristolochic acid (AA), a potent nephrotoxin. The study not only highlights the protective effect of the female sex against AA-induced renal damage but also underscores the detrimental impact of testes in exacerbating nephrotoxicity. By analyzing the influence of gonadectomy on renal function and tubular morphology, this research advances the understanding of sex-specific mechanisms in kidney injury. These findings fill a crucial gap in nephrotoxicity studies, which often overlook sex as a biological variable, and offer new perspectives on therapeutic approaches for gender-specific renal pathologies.	
Is the title of the article suitable? (If not please suggest an alternative title)	yes	
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.	No comments	
Are subsections and structure of the manuscript appropriate?	yes	
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.	The manuscript appears scientifically robust and technically sound for several reasons. First, it provides a strong foundation in the introduction by clearly framing the significance of sex differences in nephrotoxicity, referencing both clinical and preclinical studies to substantiate its focus. The experimental methods are rigorously designed, using well-established protocols for AA-induced nephrotoxicity, surgical procedures, and analysis of renal function and structure. Furthermore, the statistical approach is appropriate, with the use of two-way ANOVA and post-hoc tests ensuring accurate assessment of the data. Lastly, the discussion contextualizes the findings within the broader literature, addressing both the molecular mechanisms and potential translational relevance, which strengthens its scientific validity.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :-	yes	

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Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?	yes	
Optional/General comments	This research article on Sex-Dependent Effects of Aristolochic Acid on Kidney Injury in Mice, in this study explores sex-based differences in response to Aristolochic Acid (AA)-induced nephrotoxicity, showing that male mice experience more severe weight loss, renal dysfunction, and tubular injury compared to females. Orchiectomy (removal of testes) reduced the severity of these effects, while ovariectomy (removal of ovaries) had no significant impact on female mice, indicating that male hormones contribute to increased vulnerability. These findings emphasize the importance of considering biological sex in studies of renal injury and nephrotoxicity.. The article is well organized and accepted. In addition to that, the author needs confirmation about the query which is mentioned below. 1. Inthe introduction effectively outlines the significance of gender and biological sex in the context of disease susceptibility and progression, particularly with kidney-related ailments. However, it may benefit from a clearer focus on the specific hypothesis or research gap addressed by this study. For example, further emphasizing how your research will contribute to understanding sex differences in AA-induced nephrotoxic AKI could strengthen the reader's grasp of the study's novelty. 2. The statistical analysis appears thorough, with appropriate tests used based on the distribution of the data. However, it may be helpful to provide more context for the choice of logarithmic transformation when dealing with non-normal distributions. Also, clarifying if any adjustments for multiple comparisons were made during post hoc tests would ensure transparency in handling potential Type I errors.	

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?	(If yes, Kindly please write down the ethical issues here in details)	

Reviewer Details:

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