

Review Form 1.8

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	Ms_IJBCRR_120191
Title of the Manuscript:	SEQUENTIAL ADMINISTRATION OF FEBUXOSTAT, AMLODIPINE AND VITAMIN E ATTENUATE OXIDATIVE STRESS AND IMPROVE SPERMATOGENESIS IN TESTICULAR ISCHEMIA-REPERFUSION INJURY IN WISTAR RATS.
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://journalijbcr.com/index.php/IJBCRR/editorial-policy>)

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PART 1: Review Comments

Compulsory 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>Is the manuscript important for scientific community? <i>(Please write few sentences regarding this manuscript to justify your answer)</i></p>	<p>This manuscript is important for the scientific community as it investigates the use of a combination therapy consisting of febuxostat, amlodipine, and vitamin E for treating testicular ischemia-reperfusion injury (TIRI), a relatively new method. The study aims to examine the synergistic effects of these medications, which could potentially lead to the development of more efficacious therapeutic approaches. Each medicine in the combination has a distinct function—febuxostat acts as a xanthine oxidase inhibitor, amlodipine functions as a calcium channel blocker and vitamin E acts as an antioxidant. This versatile mechanism has the potential to provide a holistic strategy for reducing the impact of TIRI, by targeting both oxidative stress and inflammation, which are key contributors to these injuries.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title explicitly specifies the primary objective of the research, which is to examine the impact of administering three specific medicines in sequence on testicular ischemia-reperfusion injury. The study delineates the essential components, which encompass the pharmaceutical substances employed (febuxostat, amlodipine, and vitamin E), the medical condition under investigation (testicular ischemia-reperfusion injury), and the experimental participants (Wistar rats). The title emphasizes the primary results of the research: reduction of oxidative stress and enhancement of spermatogenesis.</p>	
<p>Is the abstract of the article comprehensive?</p>	<p>The article's abstract is highly comprehensive, offering a precise and detailed summary of the study. It clearly outlines the main objective of the research, which is to examine the impact of administering febuxostat, amlodipine, and vitamin E sequentially on oxidative stress and spermatogenesis after testicular ischemia-reperfusion injury (TIRI) in Wistar rats. The text describes the experimental arrangement, findings, and conclusion.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Abstract</p> <ul style="list-style-type: none"> (a) The Abstract is good and comprehensive. It will be good to include the significance of the parameters measured " For Example ". In the TD group, superoxide dismutase (SOD) and catalase (CAT) activities were significantly decreased, while malondialdehyde (MDA) increased significantly compared to the SO group (p<0.01). (b) Including a brief statement on the possible therapeutic implications or future research directions that can be derived from the study findings would strengthen the abstract's influence. (c) Ensure that the sequence of drug administration is consistently presented. <p>Introduction</p> <ul style="list-style-type: none"> (a) Ensure that the vocabularies in the introduction are consistent. For instance, use the term "testicular torsion" instead of the abbreviation "TT." (b) It will be worthwhile to rephrase this paragraph to a more simple sentence. Outline the roles of each drug in a separate sentence. This will make it more understandable and reduce the complexity of the meaning (See manuscript). <p>Materials and Methods</p> <ul style="list-style-type: none"> (a) Revisit the materials and methods and correct all grammatical errors noted. (b) On what basis were the doses of drugs selected as well as the duration? (c) There is a need to state that animal handling was done using standard procedures for animal handling. (d) Why measure Interleukin 1B? You need to connect this in your introduction by mentioning its role as a proinflammatory cytokine and its role in TIRI (e) Provide more details on the housing conditions, such as temperature, light/dark cycle, and humidity levels, to ensure reproducibility and ethical standards. (f) Describe the rationale behind the choice of control groups and their relevance to the study. (g) Provide more details on the housing conditions, such as temperature, light/dark cycle, and humidity levels, to ensure reproducibility and ethical standards. <i>Example: They were maintained under controlled conditions of temperature (22±2°C), humidity (50±10%), and a 12-hour light/dark cycle.</i> 	

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	<p>Results</p> <p>(a) For all results: Include the level of significance.</p> <p>(b) Refer to figures and tables more explicitly in the text, ensuring that each key finding is linked to visual data representation.</p>	
<p>Do you think the manuscript is scientifically correct? (Please write few sentences regarding this manuscript to justify your answer)</p>	<p>Discussion</p> <p>(a) Compare with previous findings inline and/or in contrast.</p> <p>(b) Highlight the comparative effectiveness of different treatments more clearly to emphasize key findings.</p> <p>The manuscript is scientifically correct employing distinct experimental and control groups, namely the torsion + detorsion (TD) group and the sham group. Appropriate biochemical parameters (SOD, CAT, total protein, MDA) and inflammatory markers (IL-1β, serum nitrite) were measured. Given their established antioxidant and anti-inflammatory qualities, it is logical to utilize febuxostat, amlodipine, and vitamin E as therapies.</p>	
<p>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p>	<p>The writers mentioned around fifty papers from contemporary international scientific journals in the reference sections. However, most of the references were from recent periods, suggesting that the authors extensively and comprehensively engaged with the literature.</p>	
<p>Minor REVISION comments</p> <p>Is language/English quality of the article suitable for scholarly communications?</p>	<p>The English language attains a satisfactory degree of clarity, while also integrating appropriate scientific terminology. Furthermore, the authors should meticulously review the text for any grammatical flaws and ensure the correct usage of punctuation marks.</p>	
<p>Optional/General comments</p>		

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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	<p>Ethical approval was sought and given prior the experiment.</p>

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