## **Review Form 3**

Journal Name:	Asian Journal of Fisheries and Aquatic Research
Manuscript Number:	Ms_AJFAR_125164
Title of the Manuscript:	A review on development and regeneration of teleost caudal fins: mechanism, models and therapeutic potential
Type of the Article	Review Article

Created by: DR Checked by: PM Approved by: MBM Version: 3 (07-07-2024)

## **Review Form 3**

### **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 is highly relevant to the scientific community, particularly for those studying regenerative biology and developmental processes. It brings together valuable insights into teleost caudal fin regeneration, which has broad implications for understanding tissue regeneration in vertebrates. Moreover, the potential therapeutic applications mentioned, especially in regenerative medicine, make it a significant contribution to the field.  I find the manuscript informative and well-structured. It offers a comprehensive review of existing literature, summarizing key molecular pathways and cellular mechanisms involved in caudal fin regeneration. However, I think the content could be enhanced by incorporating more discussions on potential limitations of using teleost models in comparison to mammalian systems.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is appropriate as it accurately reflects the content of the manuscript. However, a slight modification to make it more succinct could be: Teleost Caudal Fin Development and Regeneration: Mechanisms, Models, and Therapeutic Potential.	
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.	The abstract is generally comprehensive but could benefit from more emphasis on the therapeutic potential and future directions. Adding a sentence on the practical challenges or limitations of translating these findings to human regenerative medicine would provide more balance.	
Are subsections and structure of the manuscript appropriate?	The subsections and structure are appropriate, with clear divisions that help guide the reader through the developmental and regenerative aspects of teleost fins. The logical flow from developmental biology to potential applications ensures coherence.	
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 to be scientifically robust and technically sound. It thoroughly reviews the existing literature on the cellular and molecular mechanisms driving fin regeneration. The detailed exploration of signaling pathways such as Wnt, FGF, and Hedgehog supports its credibility and offers insights into their interconnected roles in regeneration.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are sufficient, but some are slightly outdated. It would strengthen the manuscript to include more recent studies from the past five years to capture ongoing research trends in regenerative biology.	
Minor REVISION comments  Is the language/English quality of the article suitable for scholarly communications?	The English quality is mostly suitable for scholarly communication, but a few minor grammatical errors should be addressed. Simplifying overly complex sentences will make the text more accessible to a broader audience.	
Optional/General comments	Overall, the manuscript makes a valuable contribution to the understanding of fin regeneration in teleost fish and its implications for regenerative medicine. Minor revisions in language and updates in references will further enhance its impact.	

Created by: DR Checked by: PM Approved by: MBM Version: 3 (07-07-2024)

## **Review Form 3**

## PART 2:

		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:**

Name:	Arfa Shahzad
Department, University & Country	College of Veterinary and Animal Sciences, University of Veterinary and Animal Sciences, Pakistan

Created by: DR Checked by: PM Approved by: MBM Version: 3 (07-07-2024)