

Review of: "Helically arranged cross struts in azhdarchid pterosaur cervical vertebrae and their biomechanical implications"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Williams et al Helically arranged cross struts in azhdarchid pterosaur cervical vertebrae and their biomechanical implications.

This well organized and written manuscript estimates the mechanical properties of pneumatized cervical vertebrae with a central neural canal based on X-ray computed tomography, and uses this to evaluate possible prey size. They show that as few as 50 trabeculae inside the vertebra increases the buckling load by up to 90%, which will promote a light and strong structure. However, there is overall little info about bone mineral content, that may impact on mechanical properties alongside with weight. Is there any knowledge on skeletal morphology, mineral content and weight of pterosaurs? Also, the question came while reading, although probably not relevant, what was the phenotype of the adult notochord in pterosaurs?

Figure 1. Please maybe include also a picture of 'left lateral view'

Figure 2. Please check that the text is correct.