



SDI Review Form 1.6

PART 1:

Journal Name:	MS: 2012 BJPR 2172
Manuscript Number:	British Journal of Pharmaceutical Research
Title of the Manuscript:	Combined oral arginine and monosodium glutamate exposure induces adverse response on the prostate and testis of rats.

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	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)
<u>Compulsory</u> REVISION comments	<p>This short study investigates the effects of various agents (i.e., arginine, glutamate, monosodium glutamate or a combination of these) on prostate and testis function in rats. Overall, the study was written well, and the experiments were performed satisfactorily. However, there are three major issues that must be addressed.</p> <p>1. Because the sample size is small ($n = 4$), many of the reported effects on serum PAP and TAP activity border on non-significant. Changes at ~20% can be the result of experimental error; some of the changes reported by the authors are <10%.</p> <p>2. All micrographs are of poor quality. The images are dark, unfocused and possibly over-stained with H&E. Testicular morphology needs improvement; Bouin's fixative is the way to go when performing this type of experiment. Creating small cuts at north and south poles to allow fixative to permeate quickly maintains the excellent morphology of the testis. As presented, it is difficult to arrive at any type of conclusion.</p>	<p>The authors admitted in the conclusion that "Further work however, is required to address some shortcomings (including small sample size) of this study and to validate reliability".</p>



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	<p>3. The final issue is with the interpretation of micrographs. The authors state changes in rats treated with glutamate, monosodium glutamate and arginine+monosodium glutamate. These changes are not convincing at all. Spermatids are clearly visible in Fig. 3 (elongating spermatids in lower right tubule), and tubules are filled with germ cells in Fig.</p> <p>4 (these are clearly not spermatogonia). Moreover, with the authors' interpretation, rats should be infertile after arginine+monosodium glutamate treatment, but somehow I doubt that they are.</p>	<p>The authors agree with the reviewer that “spermatids are clearly visible in Fig. 3. However, the histopathologist noted that the spermatids were “only few”</p> <p>Figure 3: Section of testis from rat treated with MSG (Group 4) showing seminiferous tubule (T) with only few spermatids and interstitial space (N) with inflammatory exudates. H&E stains, ×400</p>
<p><u>Minor</u> REVISION comments</p>		
<p><u>Optional/General</u> comments</p>		