Reviewer’s report

**Title:** Increased expression of neuregulin 1 in the urothelium of rat bladder with partial bladder outlet obstruction

**Version:** 0 **Date:** 28 Aug 2017

**Reviewer:** Giorgio Ivan Russo

**Reviewer's report:**

Authors evaluated the changes in expression and distribution of NRG1/ErbB2 receptor and M2 muscarinic receptor in urothelium and detrusor muscle of the rat bladder subjected to PBOO, and determined whether these changes may be association with OAB induced by PBOO.

Although the premises of the present article were good, I guess that the analysis conducted in the rats have been few. For these reasons, I recommend a major revision in order to improve the analysis of the paper. I know that this could be more challenging, but more attractive is the article the more the chance to be cited.

- There is no a correlation between NRG1 and others expression and inflammatory status of rat bladder
- There is no a correlation between NRG1 and others expression and inflammatory status of rat prostate.
- There is no a correlation between NRG1 and others expression and detrusor thickness measure.
- There is no a correlation between all markers.
- There is no a correlation between NRG1 and others expression and inflammatory status of rat bladder
- "The NRG1 may be up-regulated by activation of the muscarinic receptors through PI3K/MAPK signaling cascades which is 10 multiple binding profiles to affect the ErbB2 receptor and protects the bladder against bladder ischemia by BOO Language should be improved". This is not true since you did not evaluate the association between these markers, but only a median difference.

**Are the methods appropriate and well described?**

If not, please specify what is required in your comments to the authors.

Yes
Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English  
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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