

ESPS PEER REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 14460

Title: Mechanisms for the effect of entacapone on colon motility and ion transport in Parkinson's disease rats

Reviewer code: 00061678

Science editor: Ya-Juan Ma

Date sent for review: 2014-10-06 20:03

Date reviewed: 2014-10-23 19:43

| CLASSIFICATION | LANGUAGE EVALUATION | RECOMMENDATION | CONCLUSION |
|--|--|-------------------------------------|--|
| <input type="checkbox"/> Grade A: Excellent | <input checked="" type="checkbox"/> Grade A: Priority publishing | Google Search: | <input checked="" type="checkbox"/> Accept |
| <input checked="" type="checkbox"/> Grade B: Very good | <input type="checkbox"/> Grade B: Minor language polishing | <input type="checkbox"/> Existing | <input type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> No records | <input type="checkbox"/> Rejection |
| <input type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | BPG Search: | <input type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | <input type="checkbox"/> Existing | <input type="checkbox"/> Major revision |
| | | <input type="checkbox"/> No records | |

COMMENTS TO AUTHORS

Dear Editor, Authors Thank you for inviting me to revise the paper entitled" Mechanisms for the effect of entacapone on colon motility and ion transport in Parkinson's disease rats" - first, it is a good novel idea . - The title should be modified "better to remove mechanisms for". - aim of the work ;detailed ,no need for(including diarrhea, constipation, and abdominal pain) ,enough to mentioned digestive system. - paper is well organized and well written methodology is systematized. Thanks,

ESPS PEER REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 14460

Title: Mechanisms for the effect of entacapone on colon motility and ion transport in Parkinson's disease rats

Reviewer code: 00058121

Science editor: Ya-Juan Ma

Date sent for review: 2014-10-06 20:03

Date reviewed: 2014-11-01 13:44

| CLASSIFICATION | LANGUAGE EVALUATION | RECOMMENDATION | CONCLUSION |
|---|---|-------------------------------------|--|
| <input type="checkbox"/> Grade A: Excellent | <input type="checkbox"/> Grade A: Priority publishing | Google Search: | <input type="checkbox"/> Accept |
| <input type="checkbox"/> Grade B: Very good | <input checked="" type="checkbox"/> Grade B: Minor language polishing | <input type="checkbox"/> Existing | <input type="checkbox"/> High priority for publication |
| <input checked="" type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> No records | <input type="checkbox"/> Rejection |
| <input type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | BPG Search: | <input type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | <input type="checkbox"/> Existing | <input checked="" type="checkbox"/> Major revision |
| | | <input type="checkbox"/> No records | |

COMMENTS TO AUTHORS

Authors have exerted a substantial effort to analyze the effects of entacapone on colon motility and ion transport in PD rats and introduce their findings. Though, I have a few queries to be addressed. Please define the measurement unit for rat colon smooth muscle contraction (autonomous contraction intensity). In the gray analysis for comparison of COMT immunoreactivity 3 rats were included in each group. This obviously does not establish a statistical significance. Please comment on the discussion section. In the comparison for COMT protein expression the authors do not disclose the sample size. How many rats received each of the declared entacapone concentrations (authors report collectively 10 rats) in the analysis of entacapone on colon smooth muscle motility in 6-OHDA PD rats? How many rats had been pre-treated with α -adrenoreceptor antagonist? Power analysis to justify the sample size should be applied to the following comparisons: 1) Addition of entacapone to the basolateral membrane to measure alterations in basal potential difference, ISC, and transepithelial resistance 2) Pretreatment with indomethacin 3) Application of Amiloride, DPC, Bumetanide 4) The addition of entacapone, MDL-12330A in the investigation of Cl⁻ flux from the basolateral side into the cell