



SDI Review Form 1.6

PART 1:

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| Journal Name: | <u>British Journal of Pharmaceutical Research</u> |
| Manuscript Number: | 2013_BJPR_5761 |
| Title of the Manuscript: | IN SILICO OPTIMIZED MECHLORETHAMINE BASED DRUG STRUCTURES TARGETING BRAIN AND SPINAL CORD TUMORS |
| Type of the Article | Research Paper |

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 7 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 <i>(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)</i> |
|-------------------------------------|---|--|
| Compulsory REVISION comments | <p>The treatment of brain tumors for children is usually different than for adults. Mechlorethamine (mustine) itself is a bifunctional alkylating cytotoxic vesicant. Eleven variants of mechlorethamine are presented in this study that possess molecular properties enabling substantial access to tumors of the central nervous system.</p> <p>All twelve compounds (including mechlorethamine) exhibited zero violations of Rule of 5, indicating favorable bioavailability.</p> <p>To me the “theoric” results would be really interesting both for a pharmacologist and clinician readers if the authors will show an in vivo validation of the proposed action: BBB passage and adsorbance. May be by using a cell line (astrocytes...or CaCo2 cells for the gut).</p> <p>Moreover it will be necessary to show whether: a) the new compounds have or not toxic actions (MTT assay?); b) the new twelve compounds have the same kinetic profile (this could be done by using a neuroblastoma cell line).</p> <p>Minor points: revise the bibliography in the text.</p> | |
| Minor REVISION comments | | |



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| <u>Optional/General</u> comments | | |

Note: Anonymous Reviewer