Reviewer's report

Title: Involvement of nitric oxide synthase in matrix metalloproteinase-9- and/or urokinase plasminogen activator receptor-mediated glioma cell migration

Version: 1 Date: 20 September 2013

Reviewer: Valeria Sorrenti

Reviewer's report:

Comments to Article:
MS ID: 4700412911032324; Title: Involvement of nitric oxide synthase in matrix metalloproteinase-9- and/or urokinase plasminogen activator receptor-mediated glioma cell migration; Authors: Thompson Zhuang, Bharath Chelluboina, Shivani Ponnala, Kiran Kumar Velpula, Azeem A. Rehman, Chandramu Chetty, Eleonora Zakharian, Jasti S Rao and Krishna Kumar Veeravalli

The paper demonstrate that alpha9beta1 integrin-mediated cell migration utilizes the iNOS pathway, and inhibition of the migratory potential of glioma cells by simultaneous knockdown of MMP-9 and uPAR could be attributed to the reduced alpha9beta1 integrin and iNOS levels.

Although this article is containing results to be published, appropriate reversions according to following comments will improve the quality of the manuscript further.

Specific comments:

1. The question posed by the authors are well defined.
2. The methods are appropriate and well described.
3. The data are sound.
4. The manuscript adhere to the relevant standards for reporting and data deposition.
5. The Discussion and Conclusions are not well balanced respect to data. For example FACS analysys results should be discussed in more.
6. The work is well done and full of data but it has limitations to be commented on in some spots so unclear. I suggest to rewrite Results and Discussion.
8. The title and abstract convey what has been found.
9. The work is written in an acceptable way.

I suggest as Discretionary Revisions to add more references such as Toxicology Letters 147 (2004) 1-13; British Journal of Cancer (2011) 104, 83-90; Curr Mol
Moreover, I suggest as Major Compulsory Revisions to rewrite Results and Discussion to make the work more acceptable. For example FACS analysis results should be discussed in more.

Level of interest
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- It is an article of importance in its field

Quality of written English
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- It is Acceptable

Statistical review
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It is essential that this manuscript is seen by an expert statistician since I do not feel adequately qualified to assess the statistics.

Declaration of competing interests
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I have any financial and non-financial competing interests in relation to this paper.

I Accept this paper after minor essential revisions (which the authors can be trusted to make).