Reviewer’s report

Title: Estrogen and Soy Isoflavonoids Decrease Sensitivity of Medulloblastoma and Central Nervous System Primitive Neuroectodermal Tumor Cells to Chemotherapeutic Cytotoxicity

Version: 0 Date: 03 Mar 2017

Reviewer: Leena Hilakivi-Clarke

Reviewer's report:

This manuscript describes results of a study that investigated the effects of estrogen and soy isoflavones on the effectiveness of chemotherapy against medulloblastoma and neuroectodermal tumor cells in culture. Manuscript is well written and the experimental design is appropriate. Conclusions drawn from the data also are adequate and supported by the results. Minor clarifications are needed to the text.

Minor comments:

Page 3, lines 46-47. Please define what are PFSK1 and Daoy cells. Further, it is not apparent how the data suggest that ERbeta mediated effects may vary in different cancer subtypes. For example, do PFSK1 and Daoy cells exhibit differences in ERbeta?

Page 6, lines 119-122. Please provide more background of Daoy and PFSK1 cells, especially regarding their ERbeta content.

Page 11, lines 234 - 237. Please rewrite this sentence, because it is unclear what the authors wish to state. For example, it is not clear what the authors mean by "… determine the effects of estrogens effects."

Page 16, line 327. Clarify if Daoy cells express only ERbeta, or also ERalpha.

Page 17. It is proposed that the differences among cell lines to various treatments could be due to DMSO decreasing efficacy of cisplatin. It is unclear why DMSO would affect only one cancer cell type but not the other.

Page 17. This reviewer is not an expert in MB. Since different tumor cell types responded differently to estradiol and isoflavones, it is critical to know that the tumors these cell lines represent are clinically distinguishable. Please clarify.

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.

Yes

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:

Acceptable

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