Reviewer’s report

Title: A survivin-responsive, conditionally replicating adenovirus induces potent cytocidal effects in adult T-cell leukemia/lymphoma

Version: 1 Date: 11 Feb 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

Yes - experiments and analyses were performed appropriately

Statistics - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

Yes - the author's interpretation is reasonable
OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Yes - current version is technically sound

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: Brief summary of the research presented in the manuscript

The present study aimed to investigate the effects of multiple tumor-specific factors (Surv.m-CRAs) on ATL selective replication and survival. The authors have shown that Surv.m-CRAs efficiently replicated and induced cytocidal effects in ATL cell lines and HTLV-1-infected T cell lines.

Introduction

Introduction is supported by the relevant references. The authors may consider adding one references on the effects of Surv.m-CRAs on pluripotent stem cells. Since it is mentioned in the Introduction that "Surv.m-CRAs can kill cancer stem cells and tumorigenic pluripotent stem cell populations", the authors may include a publication by Mitsui et al., 2015, which showed that survivin-responsive m-CRA (Surv.m-CRA) killed undifferentiated human pluripotent stem cells and prevented teratoma formation in vivo in a mice model (Mitsui et al. Conditionally replicating adenovirus prevents pluripotent stem cell-derived teratoma by specifically eliminating undifferentiated cells. Mol Ther Methods Clin Dev. 2015).

Methods

The authors are expected to indicate the source of cell culture medium and supplements.

The number and year of ethical approval should be indicated.

On the page 11, line 2-3, there is a line, which should be removed.

The methods of statistical analysis were appropriate.

Results and Discussion. The Results are described in details. The Discussion focuses on the obtained data and is supported by the relevant references.
Figure Legends and Figures

Regarding Figure 2, the authors may explain in the Figure legend which cell lines were ATL lines and which lines were HTLV-1-infected T cell lines.

The abbreviation PBLs is shown in the Figures 1, 2 and 4, however, it is not explained in none of the Figure Legends. The abbreviation should be introduced as "peripheral blood lymphocytes".

References

The manuscript contains two lists of references (31 references each) with different Endnote styles. This should be corrected. The authors should choose the Endnote style corresponding to the style required for the journal, which was chosen for submission of the manuscript.

Overall conclusion

In summary, the present research was performed according to the appropriate scientific and ethical standards. There are several suggestions and recommendation to include one additional reference. The results of the study would be interesting for both hematologists, oncologists and virologists. The paper can be published in a relevant hematology or virology journal.

ADDITIONAL REQUESTS/SUGGESTIONS:

The authors may consider several minor suggestions for the Methods section, Figure legends and References described in this peer review.

Note: This reviewer report can be downloaded - see attached pdf file.

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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