Reviewer’s report

Title: AZGP1 inhibits soft tissue sarcoma cells invasion and migration

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Reviewer: Ines Graça

Reviewer’s report:

Jiayoung Liu and colleagues aimed to characterize the expression and role of AZGP1 in soft tissue sarcomas progression. Overall, the manuscript is concise and clearly written. The methodology is sound and the results were innovative and supported by the literature.

Comments

1. The background must be improved. Information about AZGP1 and its biological role in metastasis and tumor progression is very scarce. Moreover, it is not clear why the authors decided to study this gene. Only because it is deregulated in epithelial cancers or there is a clue that links sarcomas with this gene pathway. Nevertheless, the aims of this work should be further supported by the literature.

2. One of the major aims of this study was to evaluate the expression of this gene in tumor progression, therefore it should also be interesting to evaluate expression of AZGP1 in normal tissue.

3. The authors should indicate what was used as controls for cell modulation (empty vectors or cell without any modulation?).

4. The results in STS cells are promising. However, additional studies should be conducted. Expression of proteins involved in EMT should be evaluated to corroborate the phenotypic results. As referred in discussion, apoptosis and cell cycle evaluation after STS modulation could increment the results.

5. Please include in material and methods section the statistic test performed to evaluate cell migration/invasion after gene modulation.

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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