Reviewer’s report

Title: Controlled delivery of BID protein fused with TAT peptide sensitizes cancer cells to apoptosis.

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Reviewer: Kaamar Azijli

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The study of Orzechowska et al. showed that delivery of TAT-Bid sensitized prostate and NSCLC cells to TRAIL-induced apoptosis. The authors suggest that this an interesting therapeutic strategy for the treatments of these types of cancer.

Minor Essential Revisions

1. in the abstract, under Results the following sentence: "depending on time, dose and a cell line" should be corrected to: "depending on time, dose and the cell line"

2. In the last paragraph in the Results part "TAT-BID enters PC3 cells in amounts depending on time and dose, the authors should mention that cell viability is also influenced.

3. In Results: part "TAT-BID sensitizes PC3 cells to apoptosis, "Data not shown" should be mentioned after "The increment of about 15 - 20 percentage points was relatively stable for different concentrations of TRAIL."

4. Is the difference of the increase of the amount of apoptotic cells upon TRAIL-treatment of PC3 cells statistically significant in Figure 4A (mentioned on page 11)?

5. On page 12 the following sentence: “We also examined sensitive to TRAIL cervix carcinoma HeLa cells” should be changed into: “We also used TRAIL-sensitive cervix carcinoma HeLa cells”

6. Add statistics in Figure 4B

7. The results of Control and TRAIL in T59AS76A should also be added in Figure 4A and 4D.

8. In Figure 5, a figure with dosis response curves or a table with IC50 values should be shown with the sensitivities of TRAIL in the different cell lines.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

'I declare that I have no competing interests'