Reviewer's report

Title: Bcl-2 associated athanogene 5 (Bag5) is overexpressed in prostate cancer and inhibits ER-stress induced apoptosis

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Reviewer: Joerg Hoehfeld

Reviewer's report:

The authors, unfortunately, fail to address the expressed concerns in a satisfying manner. They do not provide any data that demonstrate a localization of Bag5 within the endoplasmic reticulum (ER). The presented localization data are all consistent with an association of Bag5 at the cytoplasmic surface of the ER membrane and do not reveal the presence of the co-chaperone within the ER lumen. Statements that are made throughout the text in this regard (for example - page 16: "Bag5 localizes at least partially in the endoplasmic reticulum") are not supported by experimental data.

In the absence of data that unequivocally demonstrate a localization of Bag5 within the ER, the biological significance of the observed interaction with the ER-luminal Hsp70 protein Grp78 remains elusive. Interaction was revealed by affinity chromatography and immunoprecipitation after cell lysis, and may therefore not reflect a functional interaction inside cells.

The authors need to provide data that show an ER-luminal localization of Bag5 and an interaction with Grp78 inside cells for example by FRET experiments.

Level of interest: An article of limited interest

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.