Reviewer’s report

Title: Altered human breast cancer cell features and increased chemosensitivity mediated by adipose-tissue derived mesenchymal stromal cells

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Reviewer: Reza Izadpanah

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The manuscript by Kucerova et al. entitled “Altered human breast cancer cell features and increased chemosensitivity mediated by adipose tissue derived mesenchymal stem cells” describes the effects of either co-culture or MSC-CM on the growth and chemosensitivity of a breast cancer cell. Although the findings are interesting, however, it is very hard to follow. The following issues need to be addressed:

1. The AT-MSCs should be characterized, what is their differentiation potential?
2. The methods need to be described better, for example, it is not clear how and based on what standard method the authors have measured the confluency of culture.
3. The use of CytD in chemoresistance experiments should be described.
4. Data in figure 3 are paradoxical. In proliferation studies how the higher confluency of SKBR3-MSC-CM and co-culture are correlated with tumor cell proliferation inhibition.
5. There are several grammatical and descriptive errors throughout the manuscript. A revision is recommended.

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

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.