Review of: "Detection and Spatiotemporal analysis of in-vitro 3D migratory Triple-Negative Breast cancer cells"

Fernanda Van Petten de Vasconcelos Azevedo

Potential competing interests: The author(s) declared that no potential competing interests exist.

Obrigado pela oportunidade de contribuir com o artigo e os autores. O artigo apresenta boa fundamentação teórica, clareza na redação, introdução e explicação e reciprocidade das equações. Não sou um especialista na área da matemática, não vou tentar discutir os relatos, vou deixar isso para alguém que é especialista no assunto. Meu know-how é em cultura de células e biologia molecular e neste assunto comento alguns experimentos e técnicas para enriquecer o trabalho. Abaixo deixo minhas sugestões com base no título do trabalho. Durante a cultura de células 3D, os autores utilizaram o matrigel em placa de 6 poços e lâmina de vidro, as células cresceram e as imagens obtidas tiveram o background, bem como a intensidade e o ruído descontados. ou seja, sem ruído, considero essa questão de extrema importância. Eu deixo uma duvida,

The article presents a good argumentation and foundation. the authors sought to subtract the background, as well as the intensity and noise of the images obtained. the survey that I can do is that currently the technique used by the authors to culture TNBC 3D was using matrigel in plate and glass coverslip. it is known that this allows for a short cell survival and that the rearrangement of these cells and nuclei begins to destabilize with this technique. unlike the levitation technique, the cells are suspended and not adhered to any substrate. Therefore, my only argument is: Is the title well represented because it was used a spheroid formation model? Detection and spatiotemporal analysis of migratory triple-negative breast cancer cells in 3D in-vitro Regarding the migratory part mentioned in the title, I also didn't see clarity throughout the text, was it analyzed by the segmentation of the nuclei?? The authors comment on the results and cite a biased movement of cells towards the bottom of the plate. In addition, the cells exhibit a sigmoidal proliferative characteristic, but it is also known that this is because the matrigel allows a reduced movement of cells with a tendency to the background, can you imagine an explanation for this type of movement? I really liked the paper, the idea is very good, the essays were well prepared, I only raise the issue of the title highlighting the 3D effect, since only matrigel was used and there is no comparison with another technique, but I don't see an impediment for the article just one caveat. and the other point is the issue of migration, which was very little addressed and with little foundation, that yes, I suggest using another technique and performing the measurements in order to complement and compare the data obtained.