

## Review of: "[Commentary] Impact of Total Mastectomy on the Lymphatic Pathway and the Limitation of PET Imaging in Breast Cancer Surveillance"

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Potential competing interests: No potential competing interests to declare.

- 1. At the beginning of the commentary, it may be useful to go more into detail about the rate of axillary metastasis and about the indications for axillary dissection, given that the current trend is to avoid it when possible.
- 2. It would be interesting to introduce some notes on breast gland anatomy: where we can find lymphatic vessels and how we can manage the dissection of the mastectomy flap to save or damage them. And about the axilla, are there some devices or techniques which prevent the development of seroma?
- 3. When you quote articles n. 6-7, you refer to iatrogenic neoplastic dissemination during axillary surgery: these articles do not frankly assert that. They analyze the anatomy of lymphatic drainage, the mechanisms of molecular transduction of signals among neoplastic cells, and look for new therapeutical strategies. Maybe you can shortly focus on the need for combined interdisciplinary research contributions to improve patient selection, treatment planning, and subsequent monitoring, and this is a way to link the use of the PET scan to the first part of your article, focused more on axillary dissection and its common complications.
- 4. At the end of Figure 3, the last line asserts "...lymph nodes and their role in facilitating the dissemination of cancerous cells through the lymphatic pathway...": their role is actually the opposite. Kindly clarify what you mean.
- 5. It may be useful to contextualize the use of the PET scan: it is not a routinary exam, you can illustrate its common indications in breast cancer diagnosis and monitoring.
- 6. I would write a short introduction to explain the necessity of early detection of axillary metastasis because the correct staging of the axilla can reduce the rate of unnecessary dissections.
- 7. Finally, your articles confirm what we know, so the PET scan is not indicated in I-II stage breast cancer. Maybe you can insert a short explanation of the PET scan's utility in metastatic and locally advanced breast cancer (i.e., SUV values are directly proportional to the response to systemic therapy and inversely proportional to prognosis; better evidence of the effect of target therapies in metastatic cancer; restaging in locally advanced cancer...). This way, you advise against the use of the PET scan in the early stages, but emphasize its utility in the advanced stages, where commonly you can find a higher rate of axillary metastasis.