

## 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.

Please find below some comments.

It is not clear what the concept of this study is. Mastectomies and ALND are not the principal approach nowadays for the majority of breast cancer patients. The follow-up of these patients depends on the identity of the tumour and not the type of surgical management.

- 1. While total mastectomy remains pivotal in breast cancer management, please clarify, since total mastectomy with ALND has specific indications.
- 2. The negative impact of total mastectomy on the lymphatic system arises from the disruption of normal lymphatic drainage pathways, leading to lymphedema. Please refer to statistics about this complication.
- 3. The process of metastatic development following complete breast resection is multifactorial, influenced by various mechanisms contributing to the dissemination and progression of cancer cells within the lymphatic system: Please clarify how ALND can cause dissemination of cancer cells compared to SLN.
- 4. This surgical intervention disrupts the natural flow of lymphatic fluid within the axillary basin, creating a microenvironment conducive to the seeding and proliferation of cancer cells: How can this happen?
- 5. Moreover, the removal of axillary lymph nodes during surgery not only disrupts normal lymphatic flow but also eliminates key anatomical barriers that would otherwise impede cancer cell dissemination: Specify which kind of barriers?
- 6. The loss of axillary lymph nodes as a result of surgical resection diminishes the body's defense against cancer spread, thereby enhancing the likelihood of lymphatic metastases post-mastectomy = How can this happen? Please clarify.
- 7. The loss of axillary lymph nodes as a result of surgical resection diminishes the body's defense against cancer spread, thereby enhancing the likelihood of lymphatic metastases post-mastectomy = Please clarify how this can happen?
- 8. Additionally, the process of axillary lymph node dissection itself can inadvertently disseminate cancer cells into the lymphatic system. Surgical manipulation of the axilla may disrupt tumor capsules or lymphatic vessels, leading to the release of cancer cells into the lymphatic circulation: SLND or ALND has been established and used in the management of breast cancer patients. What do you mean by that?

