

# Perspectives on axillary management after primary systemic treatment: an international EUBREAST survey

Maria Luisa Gasparri<sup>1</sup>, Jana De Boniface<sup>2</sup>, Oreste Davide Gentilini<sup>3</sup>, Orit Kaider-Person<sup>4</sup>, Philip Poortmans<sup>5</sup>, Thorsten Kuehn<sup>6</sup>

<sup>1</sup>University of the Italian Switzerland, Ente Ospedaliero Cantonale of Lugano, Lugano, Switzerland; <sup>2</sup>Karolinska Institutet, Stockholm, Sweden; <sup>3</sup>San Ra'alee University Hospital, Milan, Italy; <sup>4</sup>Oncology Institute, Sheba Hospital Tel Hashomer, Ramat Gan, Israel; <sup>5</sup>Iridium Kankernetwerk, Wilrijk- Antwerp, Belgium; <sup>6</sup>Klinikum Esslingen, Esslingen, Germany



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## 1. BACKGROUND

Consensus on the axillary management in cN+ breast cancer patients who convert to ycN0 after primary systemic treatment (PST) is still lacking. A survey was conducted to investigate the clinical practice in this setting.

## 2. MATERIALS AND METHODS

A web-based survey was developed by a multidisciplinary group on behalf of the European Breast Cancer Research Association of Surgical Trialists (EUBREAST), and distributed to breast surgeons and radiation oncologists via breast cancer societies.



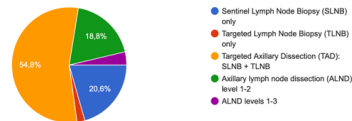
## 3. RESULTS

We received 345 replies from 43 countries. A majority of responders suggest FNA/CNB before treatment (81%) while 19 % perform histologic assessment only in selected cases.

### 3.1 RESULTS: BREAST SURGERY SECTION

The preferred surgical approach to the axilla in cN1 patients who convert to ycN0 is targeted axillary dissection (TAD) 55%, sentinel lymph node biopsy (SLNB) 21%, axillary lymphadenectomy (ALND) (level 1-2) 19%, others 5%. When SLNB is performed, single and dual tracers are used in 62% and 38% of the centres, respectively. No minimum number of SLNs is required by 36 % of the surgeons, while 8% and 56% suggest to remove at least 2 or 3 SLNs respectively. For targeted lymph node biopsy (TLNB) or TAD, there is a wide heterogeneity with regards to localization techniques. In case of multiple suspicious nodes, 65% of the responders declare to mark only one node. 47 % of responders routinely perform an additional preoperative localization of the TLN. Imaging modalities to assess the ycN status are: ultrasound (67%), MRI (21%), other (12%). Before, PST, in case of cN+/ambiguous findings, ALND is suggested by 23 % only after routine histologic confirmation of lymph node involvement, and by 45 % without, 29% of the responders perform SLNB/TAD/TLNB without additional axillary surgery, 3% suggest different approaches. After PST, 66% of the breast surgeons recommend ALND in ycN+ patients only after further histologic confirmation, while 23 % do not perform CNB/FNA. 11 % voted for TAD/SLNB/TLNB in this setting. 34 % of the breast surgeons suggest ALND for patients with ypN1(mi) status after TAD/SLNB, 31 % favor RT, 23% a combination and 12% suggest omission of further regional treatment.

In patients with cN1 and/or up to three clinically suspicious nodes converting to ycN0 status after primary systemic treatment, which axillary surgical staging approach do you offer at your institution?



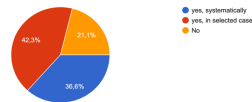
### 3.2 RESULTS: RADIATION ONCOLOGY SECTION

The decision for post-operative regional irradiation is influenced by initial nodal lymph node status (61 %) and by a combination of pre- and post- PST assessment (39%). 21% of the responders never irradiate level I in patients with a ypN>1 status after ALND while 37 % suggest selective use of RT and 42 % favour RT in all patients. Target volumes for elective nodal irradiation are determined mainly based on ESTRO (61%) and RTOG(32%) guidelines. In case of macrometastatic nodal disease (ycN0ypN+) regional node irradiation is suggested by 59 % of the radiation oncologists regardless of the number of involved nodes. 37 % suggest RT in patients with more than 3 positive nodes, while 4% would never irradiate. After a positive TAD or SLNB radiation oncologists suggest ALND in 63 % and RT in 37%. Similar results were attained for ypN1mi and ypN0(i+). Remodeling fibrotic scars rarely affect regional treatment planning.

In case of macrometastases and your choice of surgical axillary management completed with ALND (including cases where ALND was performed as staging procedure), would you



Do you perform axillary radiation therapy in ypN1 patients undergoing ALND following primary systemic treatment?



## 4. CONCLUSIONS

The results of this EUBREAST survey highlight the wide heterogeneity in the approach to the axilla after PST, corroborate the need for further clinical research and provide the rationale for the AXSANA(EUBREAST 3)

## 5. ACKNOWLEDGEMENTS

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- Deutsche Gesellschaft für Senologie (DGS)
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- Israel Breast Surgeons Society
- Israel Radiation Therapy society
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