



ASO Author Reflections: The Theseus Paradox: Marked Lymph Node and Sentinel Lymph Node in pN+ Prechemotherapy Patients: Are They the Same?

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Indication for chemotherapy as initial treatment for early breast cancer has modified its surgical treatment, allowing breast preservation in most patients who develop clinical response.¹ However, in spite of high rates of pathologic complete response (pCR) in the axilla (26–66%), in particular in patients with human epidermal growth factor receptor 2 (HER2)+ and triple-negative tumor subtypes, there is still controversy about deescalation in surgical treatment of the axilla for patients with metastatic lymph nodes at diagnosis (pN+).²

Our recent paper³ proves that it is feasible to identify and remove the metastatic lymph nodes marked with the clip/wire (100%), and in most patients (80%), this matched the sentinel lymph node (SLN). Also, in 90% of the patients with persistent lymph node disease, the marked lymph node was able to identify the residual disease.

However, no consensus on the gold-standard method for postchemotherapy axillary staging for pN+ women has been reached to date. Yet, the reality is that, if we accept the definition of the SLN as the node with greater likelihood of being affected by the disease, we should recognize that, for women with metastatic involvement of the axilla, the disease itself marks its SLN.⁴ Therefore, once the SLN has been identified (the one selected for the disease), the important thing is to discover the axillary type of therapeutic response to chemotherapy. Removal of the marked metastasized lymph node should predict residual disease, which would make

marking the SLN unnecessary. This theory is similar to the paradox of the Theseus ship. Although all its original pieces have been replaced by new ones, the boat is still the same. Likewise, the SLN chosen by disease undergoes changes due to chemotherapy, but it is still the SLN, even though another marker (such as Tc99 or patent blue) indicates a different SLN.

We should change our mind and not think of postchemotherapy axillary study as a restaging or “new boat” but rather as a tool to decide the rest of the adjuvant treatments. Most patients undergoing neoadjuvant chemotherapy (NAC) are HER2+ or have triple-negative tumor subtypes, with a high probability of pCR in the axilla, where axillary treatments might be unnecessary.

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