



Axillary Lymph Node Management in the Era of Neo-adjuvant Chemotherapy, Neo-endocrine treatment, and Targeted Axillary Dissection

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INTRODUCTION

A third of women present with locally advanced node positive disease at the time of breast cancer diagnosis¹. Historically, these women were managed surgically with ALND.

Recent studies have documented the safety and acceptable false negative rates with SLNB and targeted axillary dissection (TAD) after neo-adjuvant chemotherapy (NAC) in node-positive patients who convert to node-negative.²⁻⁶

This study reviews practice paradigms for all receptor types of breast cancer and assesses how many patients were successfully downgraded from ALND to TAD.

METHODS

- Retrospective chart review 2016-18 of patients with node positive disease who underwent NAC or neo-endocrine therapy, stage 4 excluded
- Data: demographics, treatment regimen, pathology results, and type of surgery
- TAD: excision of previously identified positive lymph nodes in addition to SLNB
- ALND for inflammatory breast cancer, skin involvement, clinically positive nodes after NAC, or positive sentinel lymph node intra-operatively

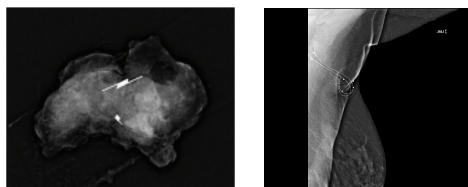


Image 1 & 2. Techniques for TAD

Left: Axillary node with SCOUT® reflector and biopsy clip (Cianna Medical)

Right: Wire-localized axillary nodes

RESULTS

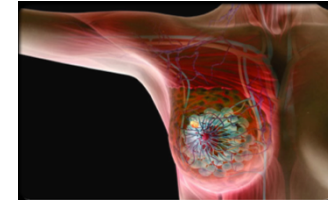
43 patients were included and the majority presented with N1 disease. Average age was 63. A complete pathologic response (pCR) occurred in 21% of patients. 3 of the 33 partial responders converted to negative node status but had partial or no response in the breast. Of those with pCR, the majority were Her2 amplified (56%) and triple negative (33%).

Of all nodal responders 91% received NAC; 9% received neo-endocrine treatment. 55% of hormone receptor positive patients received NAC, 37% neo-endocrine therapy, and 8% both. Of these patients, node response was 19% for NAC and 8% for neo-endocrine treatment. All Her2 amplified and triple negative received NAC.

TABLE 1. Response rates by phenotype

RESPONSE	TOTAL (N=43)	ER/PR - Her2+	Triple Negative	Triple Positive	ER/PR+ Her2-	ER+ PR- Her2-	ER+ PR - Her2+
pCR	9 (21%)	3 (33%)	3 (33%)	1 (11%)	-	1 (11%)	-
Partial	27 (63%)	-	2 (7%)	6 (22%)	17 (63%)	3 (11%)	-
No response	7 (16%)	-	1 (14%)	-	4 (57%)	1 (14%)	1 (14%)

TAD with SLNB was performed in 49% of patients with no further axillary surgery; 38% of those having no residual nodal disease. Of the 26% of patients who required completion ALND, 45% had no additional positive nodes. Of those who received ALND, 27% had no residual nodal disease.



CONCLUSIONS

TAD for neo-adjuvant and neo-endocrine patients has spared some women the morbidity of a complete ALND, due to pCR or patient preference after discussion of risks and benefits.

Going forward our focus will be on further implementation of TAD for those with pCR or nodal CR with continued monitoring of patient outcomes.

With anticipation of results from NSABP B-51 and Alliance A011202, we anticipate TAD becoming more popular and potentially practice-changing for breast surgeons not yet performing this procedure.

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