

## AB012. SOH22ABS213. Assessing long term survival outcomes in node positive breast cancer patients who undergo sentinel lymph node biopsy after neoadjuvant chemotherapy—a systematic review and meta-analysis

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**Background:** The use of sentinel node biopsy (SNB) after neoadjuvant chemotherapy (NACT) in breast cancer patients who were initially node positive but converted to clinically/radiologically node negative remains controversial due to a paucity of long-term outcomes. The aim was to undertake a systematic review and meta-analysis to assess 5-year disease free and overall survival within this cohort and compare it to node positive patients after NACT.

**Methods:** The study was performed in accordance with PRISMA guidelines. A systematic literature search was conducted to identify studies assessing 5-year disease free and overall survival after SNB alone in histologically confirmed node positive patients who had undergone NACT. Results are reported as a pooled estimate for OS and DFS alone and as an odds ratio (OR) with 95% confidence interval (CI) using the Cochrane-Mantel-Haenszel method for meta-analysis between groups.

**Results:** Seven studies involving 835 patients who had a negative SLNB after NACT were included. The pooled estimates of 5-year disease free survival and overall survival in patients with a negative SNB after NACT were 87.9% (95% CI: 84.5–90.7%) and 93% (95% CI: 87.8–96.8%). Patients with a positive SNB (residual disease) who

underwent axillary clearance had a reduced 5-year DFS (OR =0.52; CI: 0.39–0.69; P<0.01) and OS (OR =0.36; 0.13–0.98; P=0.05) compared to patients with a negative SNB after NACT.

**Conclusions:** Initially node positive patients who achieve a complete pathological response in the axilla after NACT with a negative sentinel node have high rates of DFS and OS after 5 years. Patients with residual disease have significantly reduced DFS and may still warrant further axillary treatment.

**Keywords:** Axilla; axillary dissection; breast cancer; neoadjuvant chemotherapy (NACT); sentinel lymph node

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### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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