

**Recommendation for Axillary Lymph Node Dissection in Women  
with Early Breast Cancer and Sentinel Node Metastasis: A  
Systematic Review of Randomized Controlled Trials Using the  
GRADE System**

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## **Abstract**

**Background:** In 2014, the American Society of Clinical Oncology (ASCO) published a clinical practice guideline on the use of sentinel lymph node (SLN) biopsy for early-stage breast cancer patients. However, these recommendations have been challenged because they were based on data from only one randomized controlled trial. Although controversial, ASCO refused to make change on their recommendation in 2016 updated guideline.

**Objectives:** We evaluated the rationale of these recommendations by systematically reviewing RCTs using the Grading of Recommendations, Assessment, Development, and Evaluations (GRADE) system.

**Methods:** We searched articles in the PubMed, EMBASE, CINAHL, Scopus, and Cochrane databases. The primary endpoints were overall survival (OS) and disease-free survival (DFS). The secondary endpoints were recurrence rate and surgical complications of axillary dissection. The quality of evidence was assessed using the GRADEpro GDT. Our recommendations were compared with those of ASCO 2016 guideline.

**Results:** Five eligible studies were retrieved and analyzed. We divided SLN metastasis into two categories: SLN micrometastasis and SLN macrometastasis. In patients with 1 or 2 SLN micrometastasis, no significant difference was observed in

OS, DFS, or recurrence rate between the axillary lymph node dissection (ALND) and non-ALND groups. For patients with 1 or 2 SLN macrometastasis, only one trial with a moderate risk of bias was included, and non-ALND was the preferred management overall. However, ALND might be appropriate for patients who placed a greater emphasis on longer-term survival at any cost.

**Conclusion:** Our recommendations are similar to those of ASCO 2016 guideline.

However, the optimal practice of evidence-based medicine should incorporate patient preferences, particularly when evidence is limited. Perhaps downgrading the level of evidence and changing the wording will stop the argument on ASCO guideline.