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# Evaluation of pathological complete response in axilla in patients with triple-negative breast cancer and pathological complete response in breast: a systematic review

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**Objective:** The role of neoadjuvant chemotherapy in breast cancer has been crucial in obtaining prognostic information through systemic treatment response. Thus, the aim was to evaluate the rate of pathological complete response in patients with triple-negative breast cancer who demonstrated pathological complete response in the breast and to determine if it is possible to predict pathological complete response in the axilla based on breast response. **Methodology:** This is a systematic review conducted following the PRISMA protocol and registered in the study registry PROSPERO ID: 498121. PubMed, Embase, and Web of Science databases were consulted with a selection of 180 studies. The Rayyan platform was used for article screening by two independent evaluators until the final selection. The final selected studies were subjected to the Newcastle-Ottawa Scale for methodological quality assessment. **Results:** Ten cohort studies evaluating breast and axilla pathological response after neoadjuvant treatment in breast cancer patients, including triple negatives, were included. In this population, the percentage of pathological complete response in the axilla was higher than the pathological complete response in the breast in almost all studies. Furthermore, in no study, a pathological response in the breast was greater than the response in the axilla. The overall rate of pathological response solely in the breast in the triple-negative population was 33.4%, solely in the axilla was 49.3%, and considering complete pathological response (breast and axilla) was 26.9%. **Conclusion:** Despite triple-negative tumors presenting an excellent rate of complete pathological response, there is no directly proportional relationship between breast and axilla response rates. Thus, it is still not possible to affirm that pathological complete response in the breast can predict pathological complete response, even in a tumor subtype with high chemosensitivity. Other factors beyond the tumor subtype may interfere with this response pattern.

**Keywords:** systematic review; triple-negative breast cancer; neoadjuvant chemotherapy; pathological response.