## Sentinel lymph node biopsy before neoadjuvant chemotherapy for clinical axillary node negative breast cancer: impact on staging

## Ihab S. Fayek<sup>®</sup>MD; Fouad A. Saleep<sup>®</sup>MD; Hany F. Habashy<sup>®</sup>MD; Alfred E. Namour<sup>®</sup> MD; Iman G. Farahat<sup>®</sup> MD;Magdy Kotb<sup>®</sup>MD

a: department of surgical oncology - national cancer institute - Cairo university - Egypt.
b: department of surgery - Fayoum university hospital - El Fayoum - Egypt.
c: department of medical oncology - national cancer institute - Cairo university - Egypt.
d: department of surgical pathology - national cancer institute - Cairo university - Egypt.
e: department of nuclear medicine - national cancer institute - Cairo university - Egypt.

## Abstact

**Background:** The ideal timing of sentinel lymph node biopsy (SLNB) is still, by far, a matter of debate. Meanwhile, several authors reported SLNB after neoadjuvant chemotherapy (NC).

**Methods:** We evaluated the accuracy and feasibility of SLNB before NC using a combined procedure (blue dye and radio-labelled detection). Axillary lymph node dissection (ALND) was performed after completion of NC in patients with breast cancer having clinically node-negative axillae.

**Results:** Among the 18 women who had metastatic SLNB (67%) detected before NC, 3 (17%) had additional metastatic node on ALND. While 15 women who had no metastatic SLNB also had no involved nodes in ALND after NC.

**Conclusion:** SLNB done before NC is a reliable and accurate diagnostic tool to stage the clinically negative axillae in breast cancer, permitting to avoid ALND after NC for patients with negative SLNB.

Keywords: SLNB; Breast Cancer; Negative Axilla.