We read with interest the publication by Elliott et al1 about sentinel node biopsy (SNB) after neoadjuvant chemotherapy (NAC). Sentinel node biopsy predicts axillary status, with negative predictive value around 95% in patients with cT1-T2 cN0 breast cancer. In the NAC scenario, however, data are limited and guidelines recommend axillary lymph node dissection (ALND) for both cN+ ycN+ and cN+ ycN0 cases, although the National Surgical Adjuvant Breast and Bowel Project (NSABP) B-18 trial showed that NAC resulted in 301 of 735 patients with positive axillary nodes (41%) compared with 423 of 743 patients (57%) receiving adjuvant chemotherapy.2

Neoadjuvant chemotherapy causes many challenges to the SNB technique. Lymphatic drainage may be distorted by fibrosis/tumor deposits in cN+ cases as shown by trials evaluating ALND after SNB in the NAC context. In the SENTinelNeoAdjuvant (SENTINA) trial, 592 of 715 cN+ cases (82.8%) became ycN0. No sentinel node was detected in 118 (19.9%) and false-negative SNB results were obtained for 32 of 226 patients (14.2%), mainly cN0 disease. We have been able to identify 50 SNBs after NAC for invasive breast cancer as of June 2014 (cT1 = 4 [8%]; cT2 = 30 [60%]; cT3 = 14 [28%]; cT4 = 1 [2%]; cTX = 1 [2%]). Forty-five cases (90%) were cN0; 3 (6%), cN1; 1 (2%), cN2; and 1 (2%), cNX. A single case (2%) of lobular histology was part of our cohort. One hundred and two lymph nodes were examined (from 1 [40%] to 7 nodes per patient; mean, 2.04). Eight lymph nodes (7.8%) from 5 patients (10%) with 1, 2 (twice), 3, and 4 nodes dissected were false negatives (tumor deposits from 0.14 to 0.5 cm), a rate close to that of SNB in non-NAC cases. One false-negative case was cN+ and 4 were cN0. Our cohort is different from that of Elliott and colleagues1 as only 1 case (2%) was lobular carcinoma and only 4 (8%) were cN+. Taken together, these data suggest that patients with cN0 and cN1 disease should have distinct protocols for axillary nodes in the NAC context. Our data encourage SNB in patients with cN0 disease despite caveats after NAC. Immunohistochemistry may be of clinical utility to detect small tumor deposits in cN+ cases, as it can significantly affect scores used to evaluate pathologic response.3

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