

endocrine therapy, 3 previous neoadjuvant chemotherapy and 3 patients who had undergone a previous node sample. The average number of sentinel nodes was 2.9 (median 3). The 2 patients without sentinel nodes had a positive axillary sample or a positive intramammary node. There were 18 patients with positive nodes – 17 of whom (94.4%) had a positive SN and one patient had a positive node sample – a single involved node with extra-nodal spread, but a negative SN.

**Conclusion:** This is a more efficient technique. It gives results equivalent to any other technique and can potentially be performed in any hospital following appropriate training.

**O-67 Prediction of axillary lymph node metastasis by size and grade of tumour – an aid for the discussion of axillary surgery in patients with operable breast cancer**

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With the introduction of sentinel lymph node biopsy in the surgical management of breast cancer, it would be helpful to be able to provide an estimated risk for axillary metastatic disease when discussing therapeutic options with patients.

We analysed the risk of metastatic axillary lymph node disease in patients treated surgically for invasive breast cancer by tumour size and grade.

Table 1: The incidence of axillary metastatic disease for invasive ductal carcinoma

Size of Tumour	Grade of Tumour		
	1	2	3
101–200	–	–	1/2 (50%)
51–100	–	10/13 (77%)	17/19 (89%)
21–50	6/21 (29%)	99/233 (42%)	81/133 (60%)
11–20	8/34 (24%)	88/258 (34%)	25/49 (51%)
01–10	4/28 (14%)	9/268 (15%)	4/10 (40%)

Table 2: The incidence of axillary metastatic disease for invasive lobular carcinoma

Size of Tumour	Grade of Tumour		
	1	2	3
101–200	–	2/2 (100%)	–
51–100	–	2/6 (33%)	1/3
21–50	0/2	19/52 (37%)	2/2
11–20	0/6	11/44 (25%)	–
01–10	0/5	1/6 (17%)	–

The risk of lymph node metastasis increases with the size and grade of tumour. All grade 1 and 2 invasive ductal carcinoma <20 mm have <30% risk of having lymph node metastasis whereas all grade 3 tumours >20 mm have a >50% risk. In the presence a single metastatic lymph node, the risk of further diseased nodes in ductal carcinoma of grade 1 is 8%, grade 2 is 24% and grade 3 is 47% and in lobular carcinoma the risk in a grade 1 is 9%, grade 2 is 19% and grade 3 is 60%. These data will aid discussion with patients prior to planning surgery on invasive breast cancer.

**O-68 The incidence of nodal involvement following completion axillary dissection for sentinel node positive disease**

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A retrospective analysis was undertaken examining the incidence of non-sentinel lymph node (NSLN) metastases amongst 486 consecutive patients with clinically node negative breast cancer. All patients had invasive disease of any type/grade with a median tumour diameter of 19 mm. Dual localization methods were used and a sentinel node defined as any node which was hot and/or blue and/or palpably suspicious at operation. Micrometastatic foci were identified on H&E step-sections; immunohistochemistry was not routinely performed. Deposits of ITC's were classified as node negative.

The total number of SLN positive cases was 131 (node positivity rate 27.1%). The mean number of nodes harvested was 2.9 (range 1–10). Two-thirds of node positive cases (89/131) had involvement of a single lymph node and over 40% of these (38/89) contained micrometastases only. The mean number of nodes removed on completion ALND was 15.8. Amongst the SLN positive patients, 35 (28%) had involvement of NSLN, 89 were NSLN negative and 7 did not undergo further axillary surgery due to clinician/patient. When a single SLN was positive for macrometastases, the chance of NSLN involvement was 30% (16/51). When micrometastases only were present in one or more SLN's, the risk of NSLN involvement was almost 17% (7/42 (p=0.15)). All had tumour in a single NSLN and the majority of deposits were >2 mm in size (5 macro-; 2 micro-). When fewer than half of excised nodes (<50%) contained micrometastases only, the chance of further disease on completion ALND was less than when this proportion was ≥ 50% (12% (2/17) versus 20% (5/25) (p=0.68).

Omission of further axillary surgery might be considered appropriate when micrometastatic foci are present in fewer than half the nodes retrieved and potential compound morbidity from sentinel node biopsy followed by delayed ALND minimised.

**O-69 Axillary recurrence in breast cancer patients after a negative sentinel lymph node biopsy**

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Sentinel lymph node (SLN) biopsy is an accepted standard of care for patients with clinically node negative breast cancer. Validation studies have revealed false negative rates of 5–10%, but few studies have reported rates of axillary recurrence in SLN negative patients without completion axillary lymph node dissection (ALND).

A retrospective analysis was undertaken to examine axillary recurrence amongst a group of 311 clinically node negative patients undergoing SLN biopsy for symptomatic and screen-detected breast cancer between January 2004 and December 2006 (median tumour diameter 15 mm). All patients were classified as SLN negative on H&E step-sections but included some patients with deposits of isolated tumour cells (H&E/IHC). To allow at least 3 months follow up, patients treated after December 2006 were excluded, together with those patients who had died without evidence of recurrence (10) and patients with DCIS only on final histology (18). This left 283 patients available for analysis, the majority of whom had received some form of adjuvant systemic therapy (262/283).

At a median follow up of 17 months (range 3–38) there has been only one case of axillary recurrence (1/283). This