

risk of LRR with 1–3 involved nodes after mastectomy and a 10 year risk of loco-regional recurrence of less than 15% is uncertain and is to be addressed in the SUPREMO trial.

An in-house Post Mastectomy Radiotherapy Index has been adopted to stratify patients for radiotherapy according to their known risk factors.

Score		
3	2	1
Nodes ≥ 4 Tumour size >50 mm/T4 Deep margin <1 mm or pectoral muscle involvement	Nodes 1–3 Tumour size 30–50 mm	Vascular invasion Tumour size 20–29 mm Grade III

Patients receive radiotherapy to the chest wall if score ≥ 3 . (This score selects patients at higher risk of systemic relapse with a minimum Nottingham prognostic index >3.4 or 10 yr survival of $<74\%$ on adjuvant online.)

We have carried out an audit of breast cancer patients treated with chest wall radiotherapy registered in our database (JCIS).

Results: Between May 1999 and May 2003, 433 breast cancer patients treated with mastectomy have been found. The average age was 59 and the average duration of follow up was 32 months.

	No	Distal Recurrence	LRR
High Risk	104	16	4
Index score ≥ 3	107	6	1
Index score <3	144	0	0
DCIS/Prophylactic	78	0	0

All LRR were associated with systemic recurrences.

Conclusion: The selection of patients at higher risk of recurrence in the intermediate group who may benefit from CWRT is possible using an index as shown above.

O-65. Chromosome 16 tumour suppressor gene in breast cancer: where are we now?

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Loss of heterozygosity at the long arm of chromosome 16 is one of the most frequent genetic events in breast cancer, indicating the presence of one or more tumour suppressor genes (TSG). E-cadherin has been proved to be the TSG at 16q in lobular tumours. In search for the target gene (s) in the more frequent low grade ductal and tubular tumours, this region of the genome has been exhaustively studied to track down the smallest region of overlap (SRO). However, the results demonstrate remarkable complexity and a clear consensus of the boundaries of the SRO (s) could not be identified. Several genes located in the vicinity of these SROs have been examined as candidate TSGs in breast cancer, but so far, none of them was considered the target gene. In our effort to identify the target TSG, we have used a novel approach (MAPH) to minimise the SRO at the region 16q22.1 and examined several individual genes located in the vicinity of this region. We are currently analysing several other genes that showed differential

expression between ductal and lobular tumours identified in gene expression analysis experiments incorporating 368 genes located on chromosome 16. In addition, a new approach using the tiling pathway array CGH to map chromosome 16 DNA copy number alterations in breast cancer with high resolution is currently underway. This is combined with gene expression analysis using a custom array chip that includes all genes encoded on chromosome 16. This approach will provide the most robust data about 16q TSG in breast-cancer.

The present article will discuss the complexity of the region 16q, the different approaches used for detection of the target gene in this area including our previous, current and future work.

O-66. Differences in presentation of lobular, ductal, mixed and special type breast cancer

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Lobular carcinoma (LC) of the breast accounts for 10% of all breast cancers and it has been suggested that it is more often bilateral and more difficult to diagnose when compared to ductal carcinoma (DC). We performed a 5 year retrospective audit (1998–2002) of all histologically proven breast cancers treated in this unit to ascertain whether there was indeed a difference in presentation of the different tumour types. In total 424 breast cancers were treated, 312 DC, 54 LC, 19 mixed (lobular and ductal) carcinomas (M) and 34 special types (ST).

Chi-squared testing showed no statistically significant difference in the frequency of bilaterality of the cancers (9% LC, 5% DC, 5% M, 3% ST) or their identification on mammography as suspicious of (M4) or diagnostic of (M5) malignancy (69% LC, 81% DC, 81% M, 66% ST). However, there was a statistically significant difference in the USS identification of these cancers as suspicious of (U4) or diagnostic of (U5) malignancy, $p = 0.001$. Interestingly, this was not due to a difference between LC and DC but between ST and all other cancers (94% LC, 93% DC, 80% M and 73% ST). This effect was maintained when considering those cancers which were not identified by any radiology as suspicious of malignancy (RI-R3 inclusive). 6% LC, 5% DC, 13% M and 23% ST fell into this category, $p = 0.003$.

Our data do not support widely held beliefs on lobular cancer but do suggest that special type breast cancers are more difficult to identify radiologically.

O-67. An audit of clinical and radiological characteristics of medullary carcinomas of the breast

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Medullary breast cancer may masquerade as a benign entity owing to its distinctive features. Records were retrieved for 59 patients from a continuous series of 75 medullary breast cancers from 1990 to 2005. The majority were symptomatic at presentation (lump-42 patients; pain-1 patient); 16 patients were detected at screening. Scores on clinical evaluation (P), mammography (R), and ultrasound (U) were evaluated.

	P	R	U
Score of 1:	6	0	1
Score of 2:	4	7	7
Score of 3:	13	18	10
Score of 4:	14	13	13
Score of 5:	22	14	7
Total Patients	59	52*	38*

*Not all patients had both forms of radiological imaging.

Results:

- Based on mammography alone, 48% of medullary cancers were designated benign or intermediate (R score of 3 or less).
- Based on ultrasound alone, 47% of medullary cancers were designated benign or intermediate (U score of 3 or less).
- Combining R and U scores, and assigning the higher value, 35% of medullary cancers were designated benign or intermediate.

Conclusions: 1. The use of mammography or ultrasound in isolation to evaluate medullary breast cancer lowers diagnostic accuracy considerably.

2. The manner of presentation of medullary breast cancer mandates tissue diagnosis on all breast lumps regardless of clinical and radiological findings.

O-68. Incidence of intra-mammary (Intra-M) nodes in completion mastectomy specimens: implications for breast conserving surgery (BCS)

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Recent sentinel node biopsy (SNB) studies have highlighted the possibility of missing low lying (Intra-M) nodes by conventional axillary surgery. The significance of such nodes is unknown.

This study analyses the incidence of Intra-M nodes that were excised after a 4 node sample performed with BCS.

Between 1999 to 2003, 157 patients were treated with BCS and ANS and required completion mastectomy for involved margins as per protocol. The incidence of nodes in the completion specimen and the effect of this on prognosis was assessed. Overall 48% ($n = 76$) had Intra-M nodes. For ANS negative cases ($n = 71$), an Intra-M node was positive in 10 (14%). This resulted in 2 patients requiring additional therapy to that planned on the results of BCS and ANS.

In 86 ANS positive cases, an Intra-M node was positive in 15 (17%) and no change in therapy was indicated.

This study shows a high incidence of Intra-M nodes (48%) in a series of patients having completion mastectomy after BCS and ANS. Such cases are more likely to be node positive given the extent of disease that required mastectomy. Even so, only 2 cases required a change in adjuvant treatment plan. The implications of this study for patients not requiring completion mastectomy is that techniques such as palpating the tail of the breast during ANS or SNB may be worthwhile. However, the overall clinical significance of Intra-M is likely to be minimal.

O-69. Surgeons' views on multi-disciplinary breast meetings

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Aim: The aim of the study was to assess surgeons' views and their current commitments to multi-disciplinary breast meetings.

Method: 250 questionnaires were sent out to registered members of the British Association of Surgical Oncology. 136 were returned (reply rate 54.4%).

Results: All those who replied were involved in MDMs. 80.9% held MDMs once a week, 13.2% \times 2 per week and 3.7% \times 3 per week. 3 surgeons were involved in MDMs less frequently than once every 2 weeks.

Only 28% of MDMs were held during a protected session. Over 95% of surgeons and breast care were present for the whole meeting. Radiologists and pathologists were present for the whole meeting in between 90–95% of cases. No radiologists attended in 1.5% and no pathologists in 0.7% of meetings. In contrast clinical oncologists were present for the whole MDM in 70% of cases and medical oncologists attended the whole meeting in only 44.1% of cases.

There is variability in which patients were discussed in MDMs.

Suggestions for improvement included more time on protected sessions (72.8% in favour), time to prepare for meetings (29% in favour), allocation of a designated co-ordinator (30.9% in favour) and attendance of oncologists for the whole meeting (over 35% in favour).

Conclusion: The majority of Breast MDMs occur at breakfast, lunch or in the evening. There was variable attendance with a significant % of both clinical oncologists and medical oncologists not being present for the whole meeting. A quarter of units do not discuss patients with breast cancer before operation. There is a need to improve provision for MDMs and to produce national guidelines for these meetings.

O-70. Pre-operative study of the tolerability of Faslodex and Tamoxifen in a group of pre-menopausal women

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Aim: The aim of this study is to compare the efficacy and tolerability of Faslodex and Tamoxifen in a pre-operative study, of pre-menopausal women with ER positive breast cancer.

Patients and methods: 42 pre-menopausal women with ER positive breast cancer have been enrolled into a randomised pre-operative study of Faslodex 750 mgs (given as 3 separate intra-muscular, 5 ml injections) and Tamoxifen 20 mgs orally, for 14–16 days between diagnosis and surgery. All patients had data collected on tolerability, side effect profile and pain scores during injections. Side effects reported over 10% are listed below.

Results: see Table 1.

Injection related morbidity: Pain scores using a visual analogue during each individual injection were recorded. (0 being no pain and 10 being worst pain imaginable). Average pain