

and ki67 vs. Ck5/6). Results were confirmed by triple immunofluorescence and Western blotting experiments.

**Results:** See the table. FEA, ADH, DCIS, LN, tubular carcinoma disclosed a purely glandular phenotype, with ki67 proliferation rates ranging from 1.5% to 13%, ER+ cells 95% to 98%.

	% Cells staining	
	Ck 8/18+	Ck 5/6/+
Normal Epithelium		
Lobules	88	8
Ducts	44	93
ER neg		
Lobules	94	13
Ducts	79	79
Ck 5/6+, ER+	100	
UDH		
All	87	57
ER+	97	10

#### Conclusions:

1. Oestrogen receptor-alpha is a surrogate marker of glandular differentiation of normal and benign and malignant proliferative. Ck8/18-positive subpopulation divides to ER+ and neg. The luminal epithelium of lobules and ducts of the resting breast is distinct with a higher glandular differentiation within the lobules.
2. UDH shows a higher percentage of ER+ cells but lower ki67+ cells and that dissociation of ER and ki67 is similar to normal breast epithelium.
3. All types of CIS and tubular carcinoma disclose a glandular phenotype with a high percentage of ER+ cells, as do FEA and ADH. Our data supports the hypothesis that these lesions are derived from glandular cells of normal epithelium, rather than "stem" cells.

#### **O-14** The use of MRI in the management of patients with invasive lobular carcinoma of breast

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Invasive lobular carcinoma (ILC) accounts for 10% of all breast cancers. The use of conventional radiology for the selection of patients with (ILC) for breast-conserving therapy remains controversial.

The aim of this study is to examine the accuracy of MRI in prediction of tumour size and to compare this with other radiological modalities. And also to determine whether a policy of pre-operative MRI affects the relative number of patients undergoing breast-conserving surgery, mastectomy and re-operation for ILC of the breast. Demographic data, radiology results, operative findings and histopathology results were collected prospectively for all patients diagnosed with ILC between Jan 2000 and Jan 2006. 101 female patients underwent mammographic and ultrasonographic assessment of their tumours. Thirty-seven (37%) of these patients underwent further assessment by MRI.

**Results:** See the table.

Tumour size as determined by MRI correlated most accurately to histopathological size ( $r=0.588$ ,  $P=0.001$ ) when compared to mammography ( $r=0.318$ ,  $P=0.099$ ) and ultrasound ( $r=0.119$ ,  $P=0.353$ ).

MRI is more accurate than conventional radiology at pre-operatively determining tumour extent. MRI significantly decreases the chance of re-operation by two-thirds

without significantly increasing the radicality of surgery for invasive lobular carcinoma of the breast.

	No MRI	MRI	P
N	64	37	
Median age in years (range)	64 (39–86)	60 (47–85)	0.117
Conventional radiology – median tumour size in mm (range)	14.5 (4–80)	13 (4–74)	0.891
Histopathology – median tumour size in mm (range)	18 (1–85)	20.5 (1–90)	0.329
Breast-conserving surgery n (%)	39 (61)	19 (51)	0.348
Mastectomy n (%)	25 (39)	18 (49)	0.348
Re-operation n (%)	17 (44)	3 (16)	0.037

#### **O-15** Re-excision surgery following breast conservation: what margin is adequate?

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**Introduction:** The definition of adequate margins following wide local excision (WLE) for breast cancer remains contentious with practices varying depending upon disease process and local policies. We aimed to measure re-excision rates, investigate relationship of margin width and histology and generate information to allow clinical decisions to be made.

**Methods:** We identified all patients who had re-excision surgery following WLE for invasive & in-situ disease. In all patients we recorded margin status (involved, very close [0.1–2 mm], or close [2.1–5 mm]), primary tumour type (invasive or ductal-carcinoma-in-situ [DCIS]), grade and subsequent re-excision(s) histology. We compared re-excision histology with primary margin status.

**Results:** Between 2001 and 2006 (60 months), 137 of 1450 patients (9.8%) were re-excised following WLE. Of 56 patients with involved margins with invasive tumour, residual disease was identified in 36/56 (64.3%) and in 7/28 (25%) with very close or close invasive margins (0.1–5 mm). Residual disease was seen in 34/44 (77.27%) and 13/33 (39.3%) with involved or very close or close DCIS margins respectively. When margins exceeded 2 mm, residual invasive and in-situ disease was identified in 18% and 33% of patients respectively.

**Conclusion:** This study demonstrates that failure to re-excise 2–5 mm margins may leave residual disease in a proportion of patients. Residual disease is more likely to be identified in patients diagnosed with in-situ disease with involved or close margins.

#### **O-16** Wide local excision with resection of cavity margins: is it really necessary?

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**Introduction:** Residual disease at excision margins after breast conservation surgery for cancer necessitates further surgery. Primary resection of cavity margins ensures completeness of excision, but is associated with greater disfigurement. This study evaluates re-operation rates for margin positivity after wide local excision (WLE) with and without cavity margin resection.

**Methods:** Data were collected retrospectively from 01/06/01 to 31/04/06 on patients undergoing WLE with or without cavity margin resection. Histological results were examined for all patients with details of all further surgical procedures and histopathology of further resections.

**Results:** 598 patients (mean age-56 years) underwent WLE with axillary surgery as clinically indicated with