



## Unexplained National Differences in the Management of DCIS: the Sloane Project Experience

NCIN/UKACR

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[www.sloaneproject.org.uk](http://www.sloaneproject.org.uk)



## The Sloane Project – Background and Aims

### Background

- Uncertainties about natural history, invasive potential and optimal treatment
- Clinical trials have produced conflicting results

### Aims

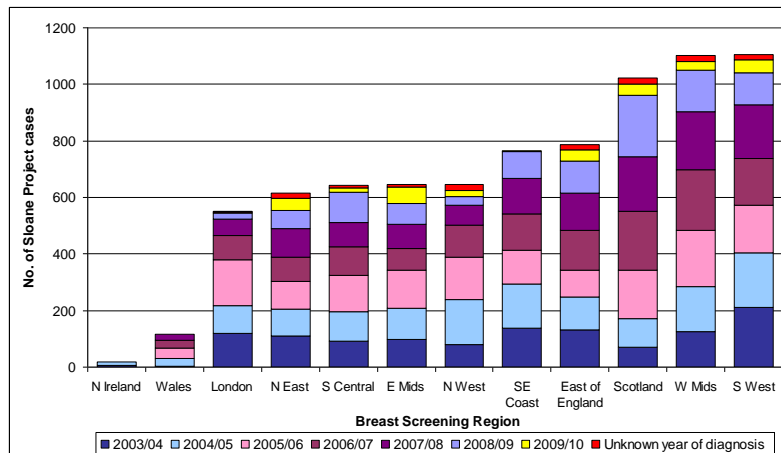
- To improve knowledge about the diagnosis, treatment and clinical outcomes of screen detected carcinoma in situ and atypical hyperplasias
- To enable patients and health care professionals to make more informed choices regarding treatment in the future

Named after the late

Professor  
John Sloane



## Number of cases entered by screening region to date (April 2003 to April 2010)



Total number of cases = 8,021

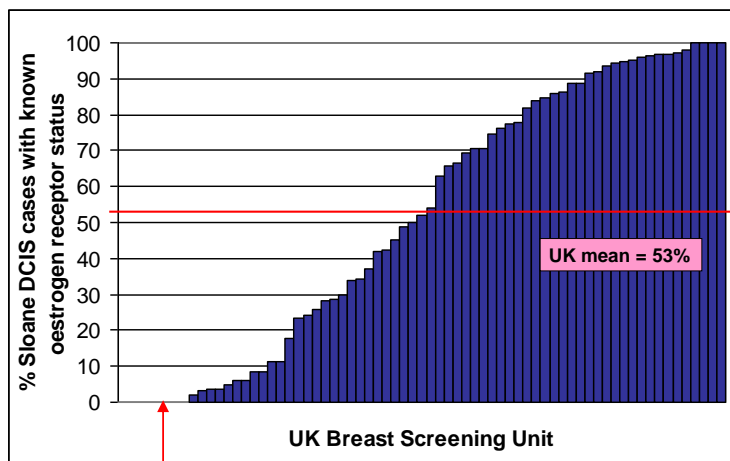
## Variation in Pathology (4296 DCIS cases)

Receptor Status				
	Positive	Negative	Not Known	Cut off for positivity used
Oestrogen Receptor Status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Progesterone Receptor Status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
HER-2 Status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

### Receptor status

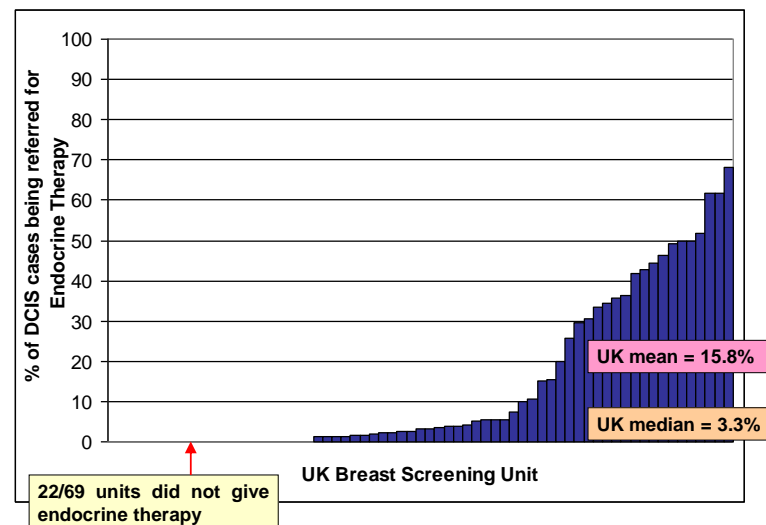
- Known Oestrogen Receptor status 52.7% (77% positive)
- Known Progesterone Receptor Status 32.0% (60% positive)
- Known Her-2 Receptor status 6.8% (45% positive)

### Variation in known oestrogen receptor status (DCIS cases) in each screening unit



Thomas J, et al. *The Breast Journal* 2008;14 (1): 33-38

### Variation in endocrine therapy given to DCIS cases in each screening unit



## ER Status and Endocrine Therapy

- Receptor status of DCIS cases was reviewed along with the cut off criteria for negative/positive status-determination for those cases
- Findings suggested that a wide range of cut-off values are being applied in laboratories across the UK. Reporting practice was also inconsistent within laboratories
- There is a need to standardise reporting of receptor status and give clear guidance on scoring methodologies and cut-off points
- There is wide variation between screening units in the endocrine therapy given to DCIS cases BUT
- NICE Clinical Guideline 80 on the *Diagnosis and treatment of early and locally advanced breast cancer* (February 2009) states that Tamoxifen should not be prescribed to patients with non-invasive breast cancer

## Variation in Surgical Treatment

(4296 DCIS cases)

Surgical Procedure(s) Total number of operations performed (if this figure is more than 2 please use separate form for operation 3 onwards)		<input type="text"/>	
Was there a pre-operative diagnosis of DCIS?		Yes <input type="checkbox"/> No <input type="checkbox"/>	
Operation 1		Operation 2	
Date (dd/mm/yyyy)	<input type="text"/>	Date (dd/mm/yyyy)	<input type="text"/>
Grade of surgeon performing operation	<input type="text"/>	Grade of surgeon performing operation	<input type="text"/>

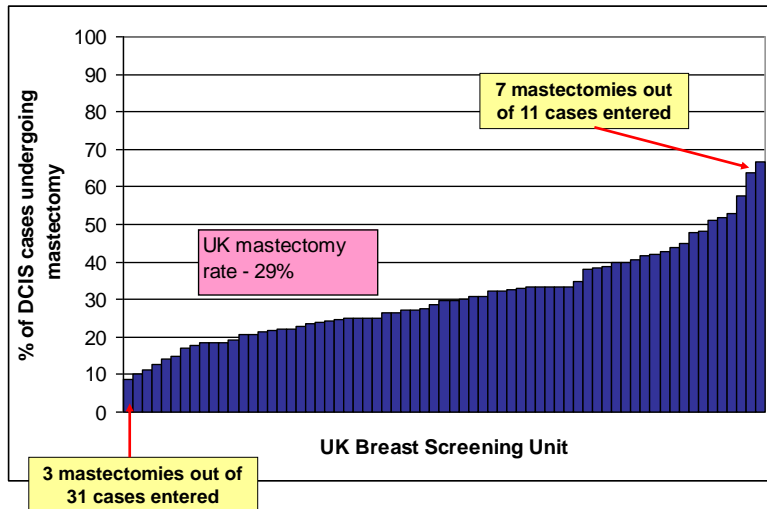
### Non-operative diagnosis of DCIS

Yes	84.2% (3617)
No	14.2% (610)
Unknown/unrecorded	1.6% (69)

### Number of operations

1 op	71.5% (3070)
2 or more ops	28.4% (1222)
No surgery	0.1% (4)

## Variation in mastectomy rate in each screening unit (DCIS cases)



## (3227 cases with non-operative diagnosis of DCIS)

### Axillary Node Procedures

Axillary Procedures		Yes	No	
Were axillary nodes taken? <input type="checkbox"/> Yes <input type="checkbox"/> No				
If "Yes" which of the following procedures were carried out (Tick all that apply - If more than 2 operations please use separate form): -				
Sentinel node procedure	Operation 1	Operation 2	Operation 1	Operation 2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Axillary node sample	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Axillary node clearance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Axillary nodes taken?

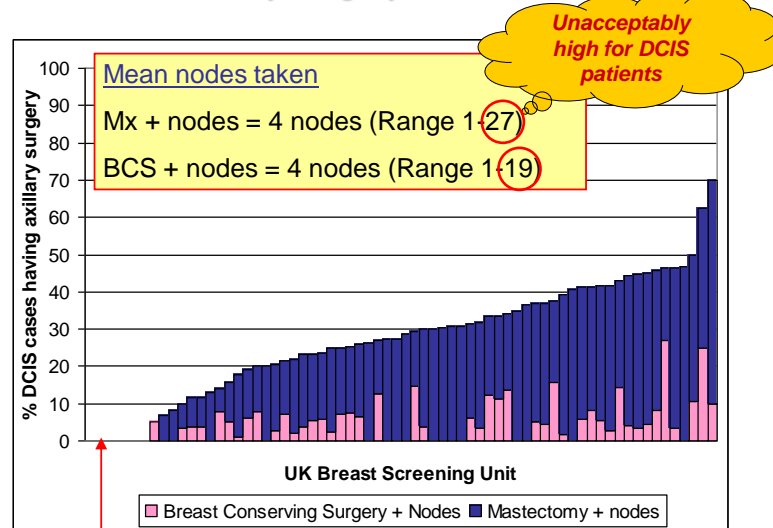
Yes	28.8% ( 930)
No	70.3% (2267)
Unknown	0.9% ( 30)

### Of the 930 Axillary procedures carried out: -

- 77.6% (722) of axillary procedures were carried out with a mastectomy.

*Process for managing outliers in breast cancer surgery;  
The Royal Australasian College of Surgeons:  
90% of DCIS patients undergo no axillary surgery*

## Variation in axillary surgery in each screening unit



## (3020 conservatively treated DCIS cases)

### Adjuvant Radiotherapy

Did the management strategy include (Tick all that apply):

Radiotherapy ..... ☐ Other therapy ..... ☐

Hormone Therapy ..... ☐ No further adjuvant therapy ..... ☐

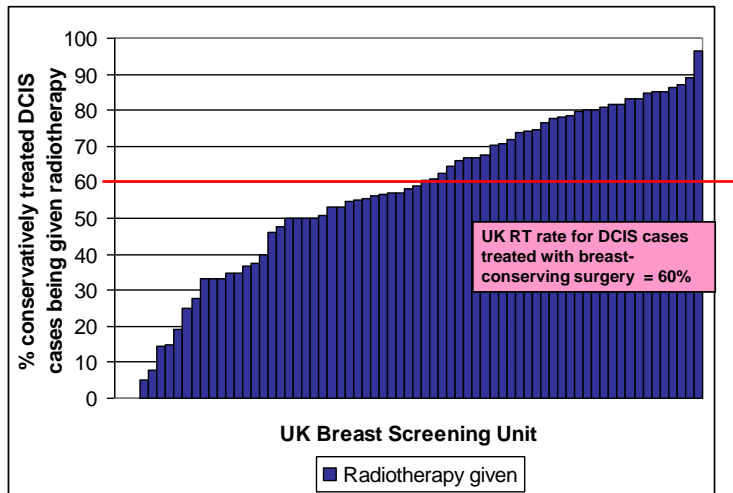
If management strategy included Hormone Therapy please indicate date started:

Please indicate type of Hormone Therapy: Tamoxifen ..... ☐ Other ..... ☐

Aromatase inhibitor ..... ☐

- Adjuvant radiotherapy (from treatment form)
    - Radiotherapy alone 46.5% (1404)
    - Radiotherapy & endocrine therapy 13.3% ( 103)
- 60%

### Variation in radiotherapy given to DCIS cases treated with breast conserving surgery



Dodwell D, et al. *British Journal of Cancer* 2007; 97: 725-729

### Variation in radiotherapy (RT) given to DCIS cases treated with breast conserving surgery (BCS)

- There is a marked **variation** in the use of RT by breast screening units within the UK
- Overall, patients with DCIS treated with BCS were significantly more likely to have RT planned (and given) if they had large ( $\geq 15$  mm), intermediate or high-grade tumours or if central comedo-type necrosis was present
- Unexpectedly, **margin width** did not appear to have a significant effect on the decision-making process

