



# NHSBSP/ABS at BASO Audit of Screen-Detected Breast Cancers 1 April 2007 to 31 March 2008 and BCCOM Year 4 Data



ABS at BASO Conference and AGM  
York Racecourse  
17 & 18 March 2009

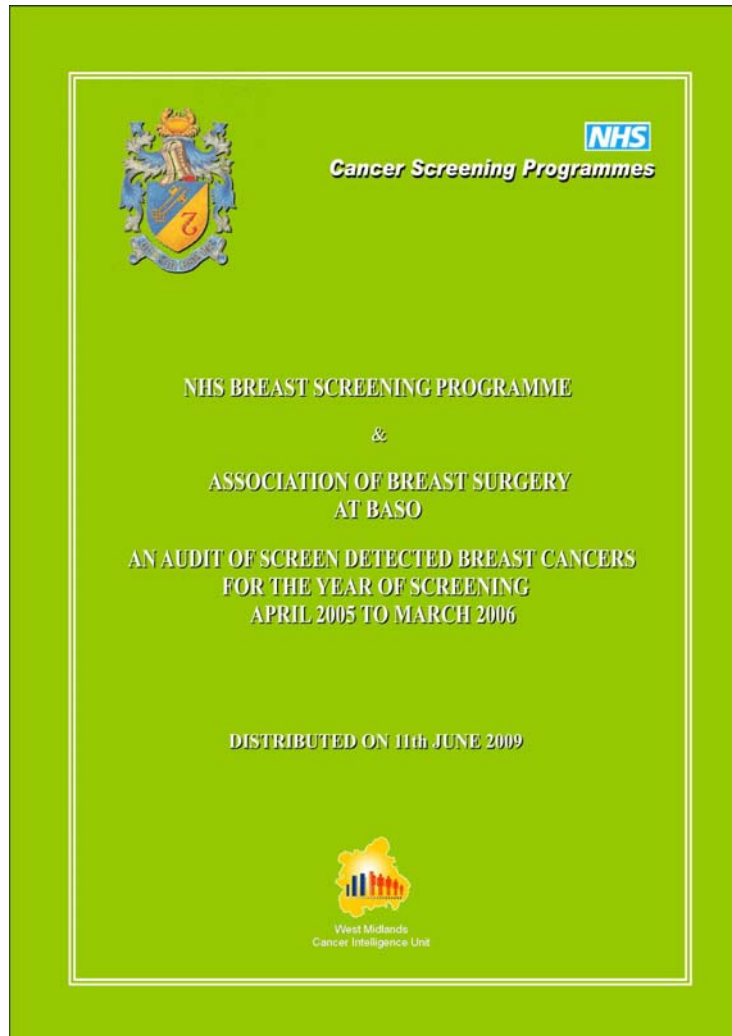
Dr Gill Lawrence

Commentators: Professor Michael Kerin  
and Mr Neil Rothnie

**NHS**

**Cancer Screening Programmes**

# NHSBSP & ABS at BASO Booklet



The 2007/08 data booklet will be available on **11 June 2009**

New *QA Guidelines for Surgeons in Breast Cancer Screening* are now available on the NHS Cancer Screening website. Surgeons and screening contacts will receive paper copy at the end of March 2009

Available on [www.wmpho.org.uk/wmciu/](http://www.wmpho.org.uk/wmciu/) and [www.cancerscreening.nhs.uk](http://www.cancerscreening.nhs.uk)



# NHSBSP/ABS at BASO Audit 2007/08 Background Information

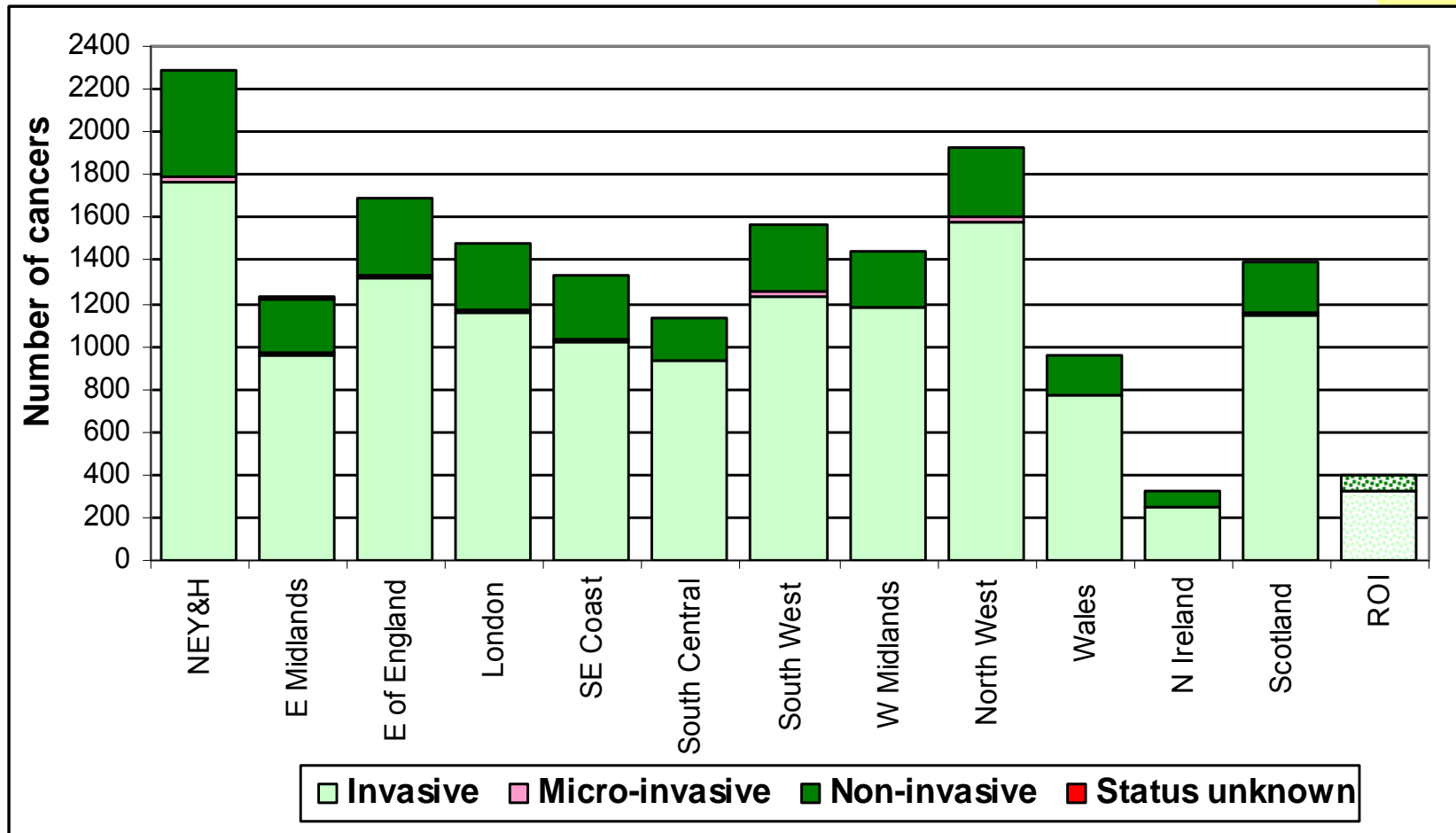
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# NHSBSP 2007/08

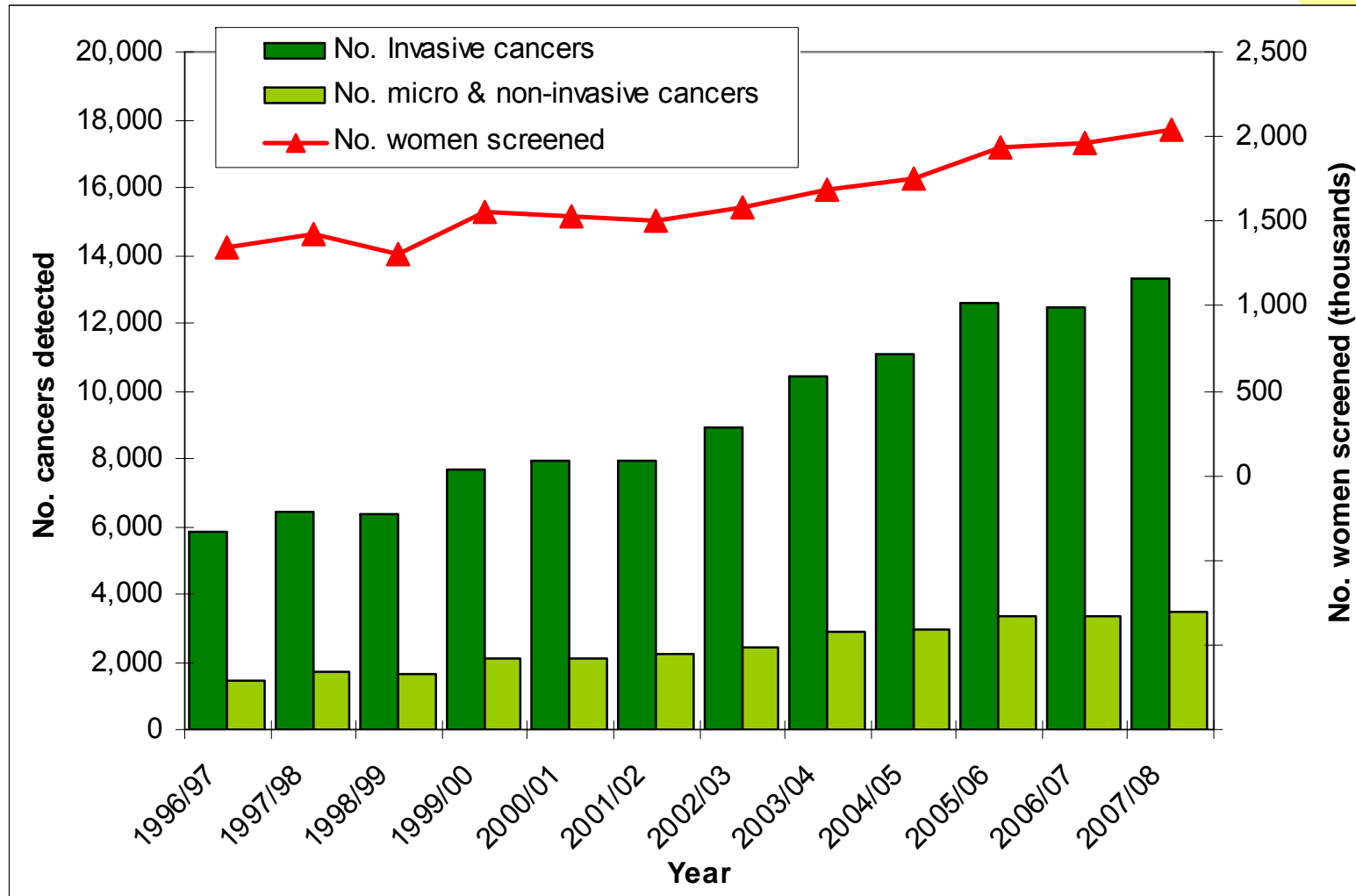


- 2,042,497 women screened
- 16,792 cancers detected
  - 13,305 (79%) invasive
  - 3,311 (20%) non-invasive
  - 155 (1%) micro-invasive
  - 21 cancers unknown invasive status
- Cancer detection rate
  - Overall 8.2 per 1,000 women screened
  - Invasive 6.5 per 1,000 women screened
  - Non-invasive 1.7 per 1,000 women screened
- Age distribution
  - 50-64 years = 66%
  - 65-70 years = 27% (13% in 2002/03)
  - 71-75 = 4%

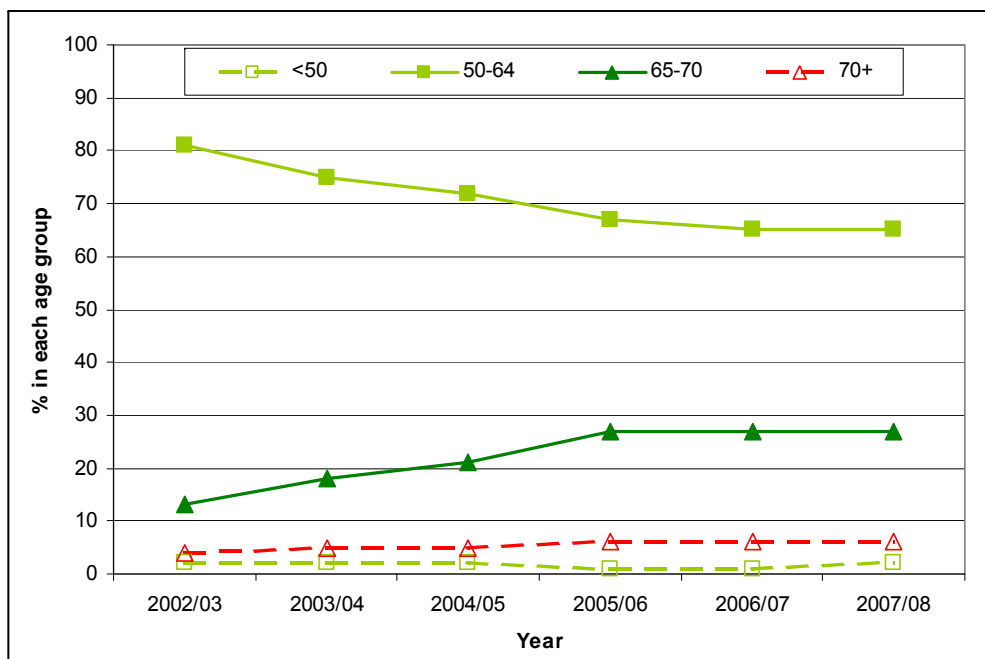
# Cancers detected in each region/country in 2007/08



# Cancers detected and women screened – changes over time

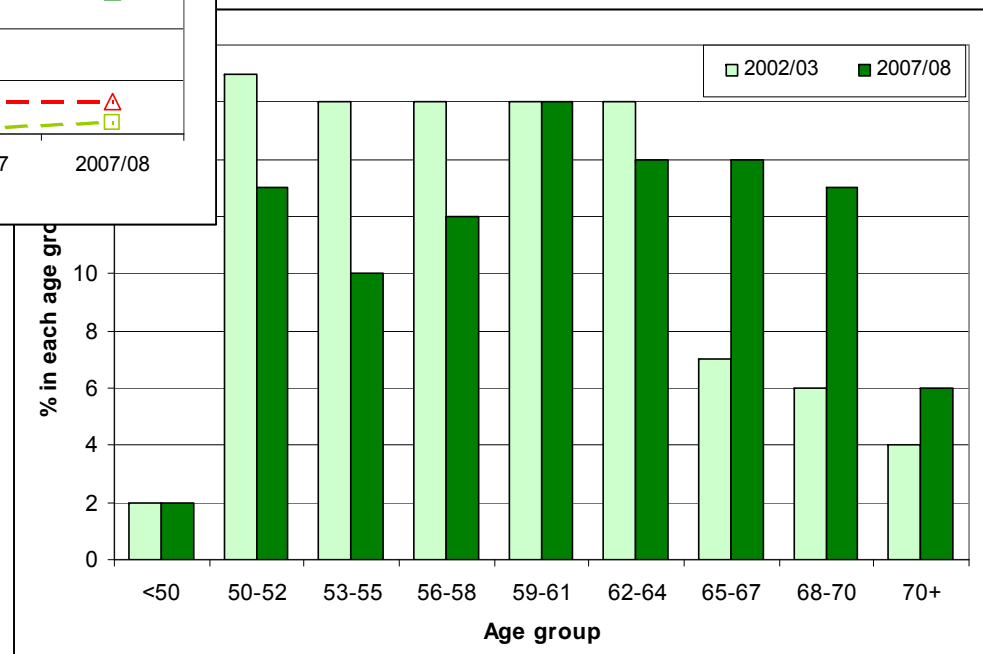


# Age distribution of women with screen-detected cancers



The 64-70 age expansion has not started in N Ireland

The last unit to start the expansion in the UK was MWA in April 2006

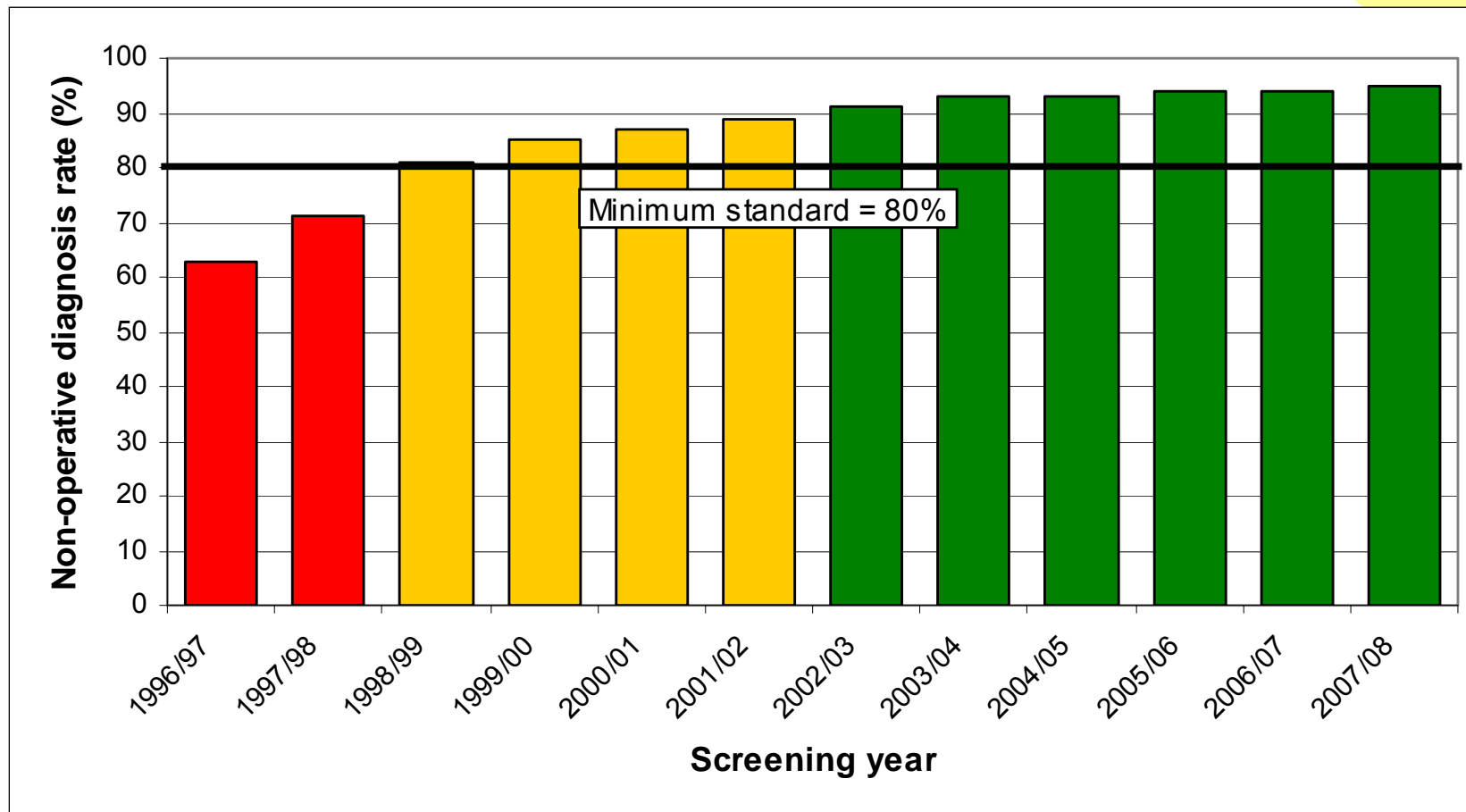




# Non-operative Diagnosis

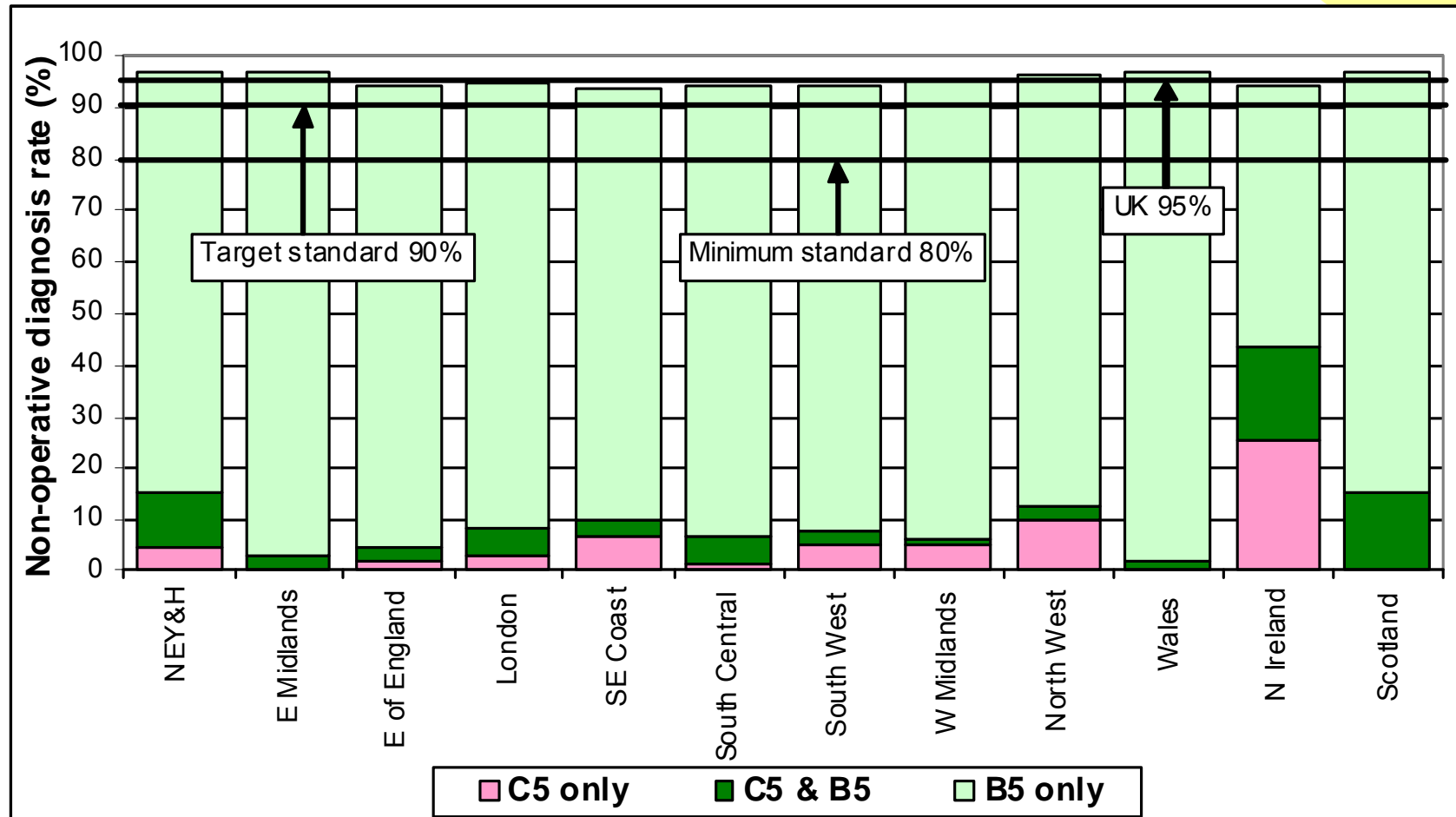
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# Increases in non-operative diagnosis with time



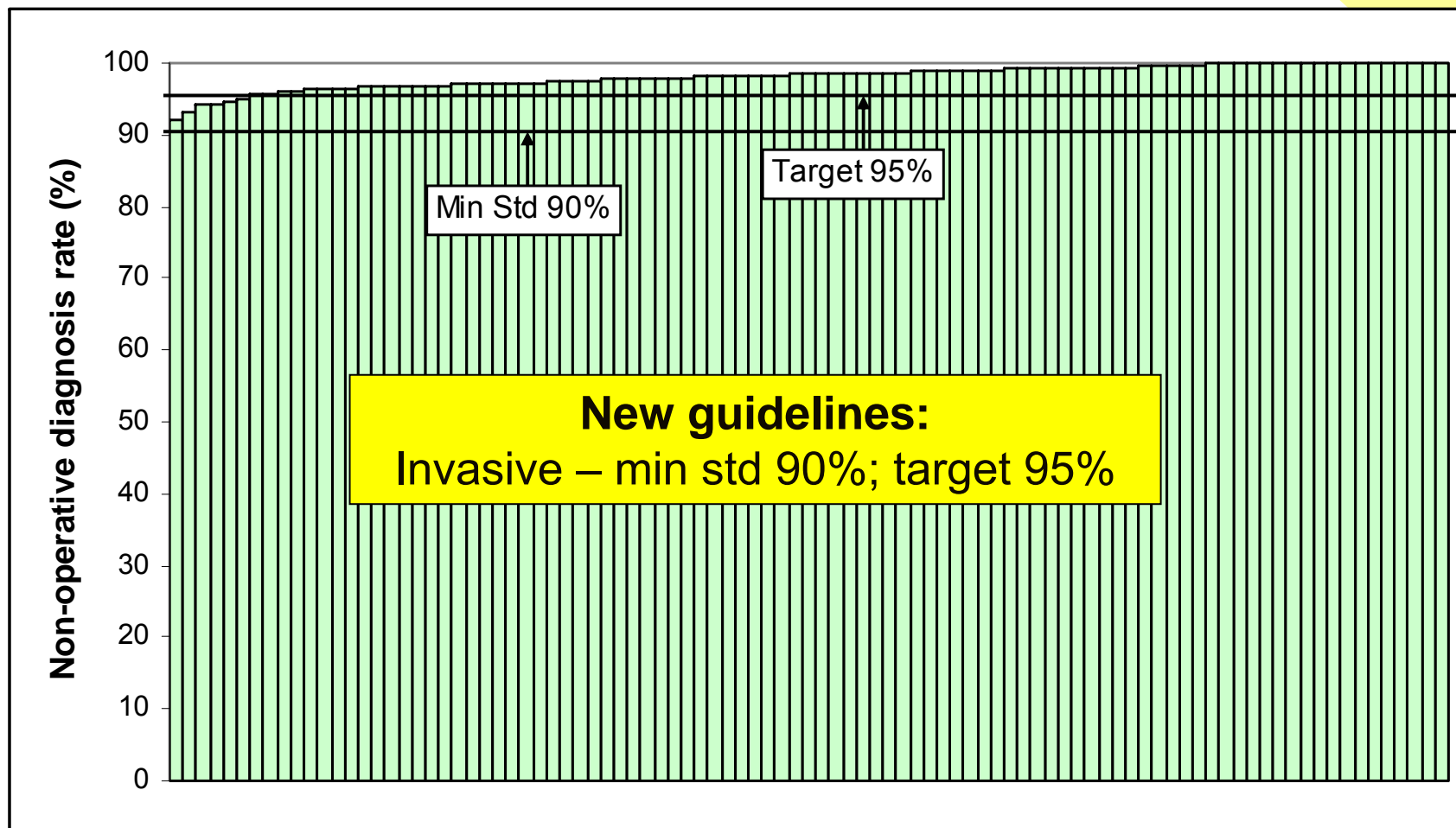
1996/97 B5 only = 17% Non-operative diagnosis = 63%  
2007/08 B5 only = 86% Non-operative diagnosis = 95%

# Non-operative diagnosis method



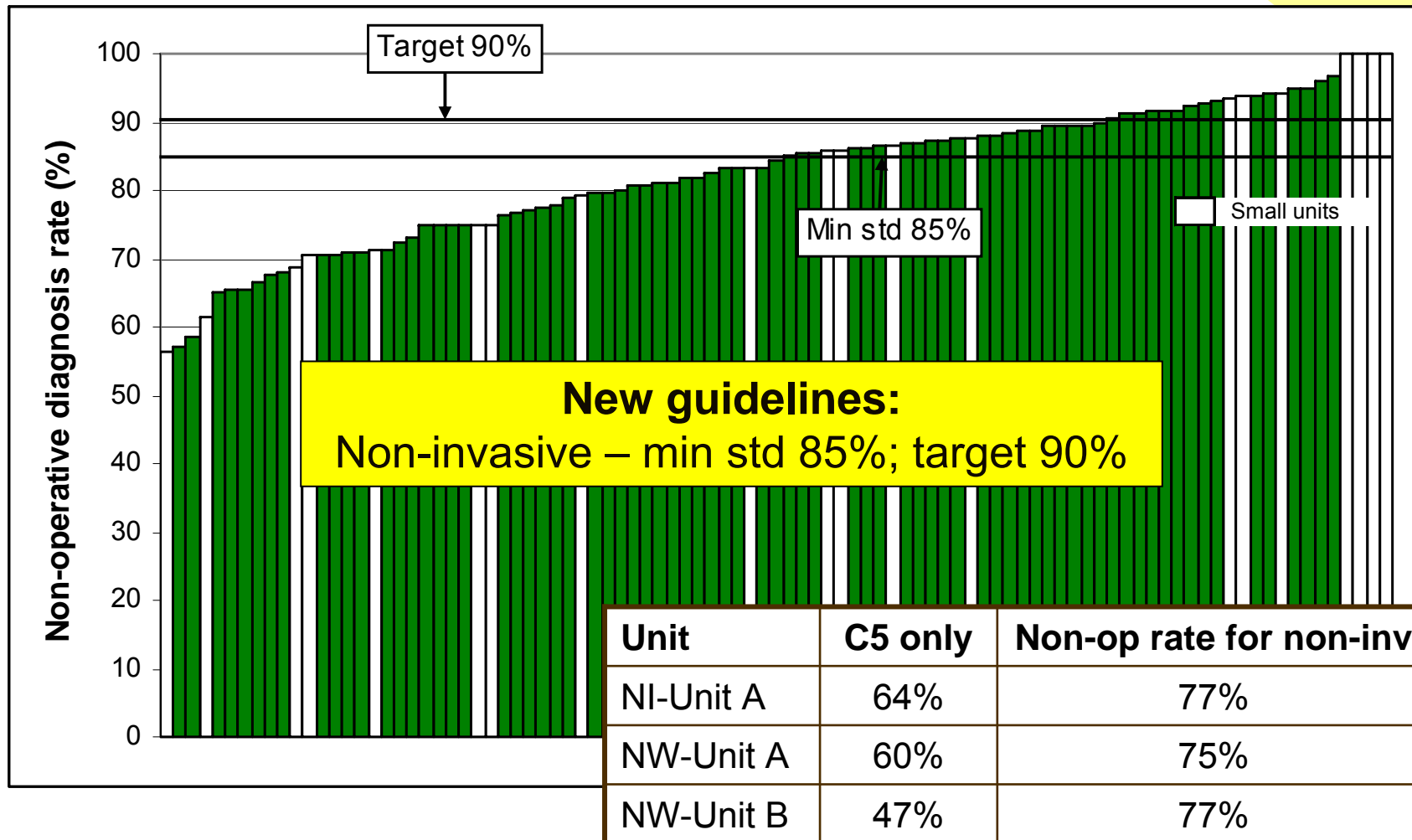
C5 only; 1 unit in NI (64%) and 2 units in North West (60% and 47%)

# Non-operative diagnosis rates - invasive cancers



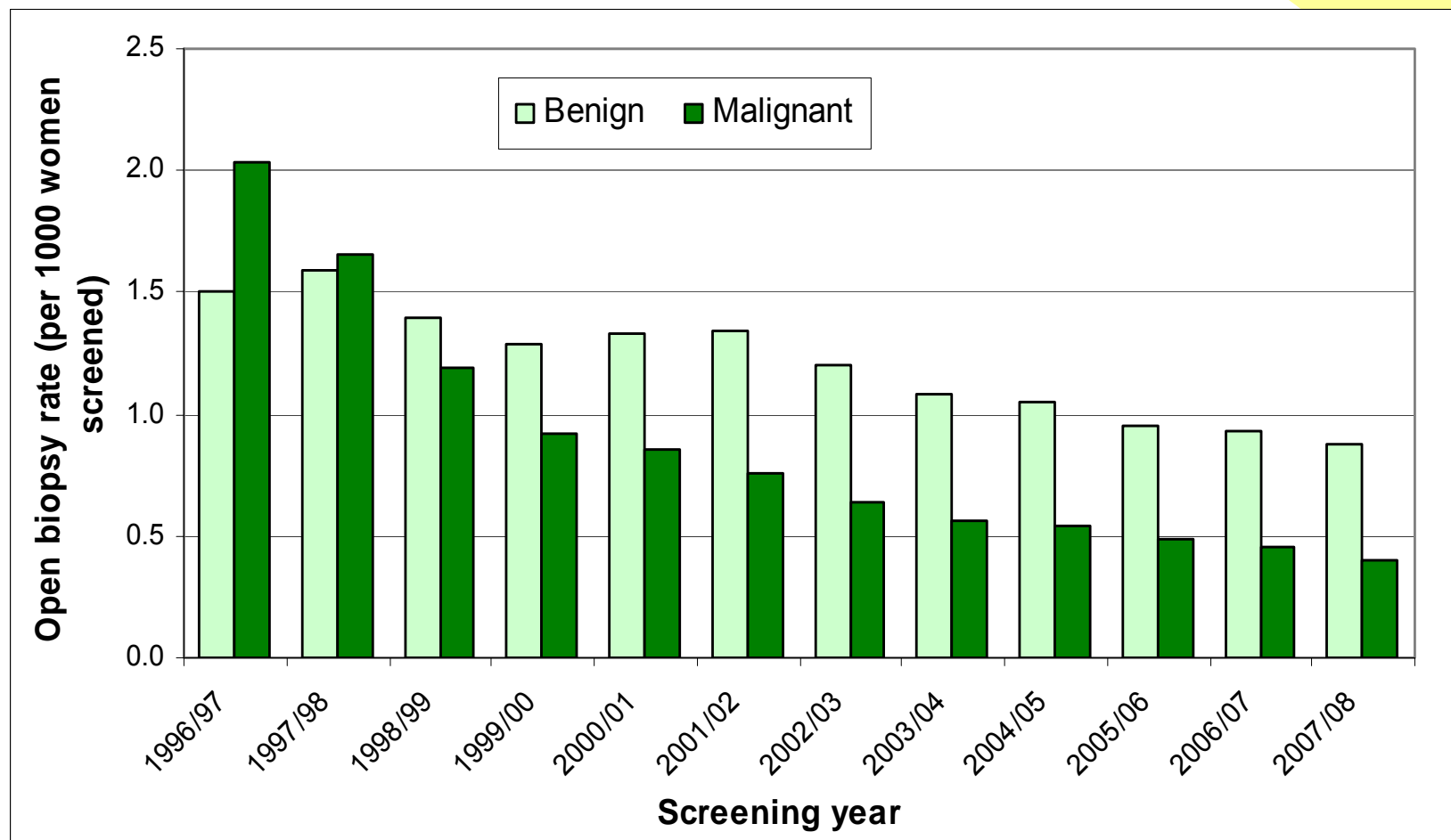
6 units lower than the 95% target

# Non-operative diagnosis rates - non-invasive cancers

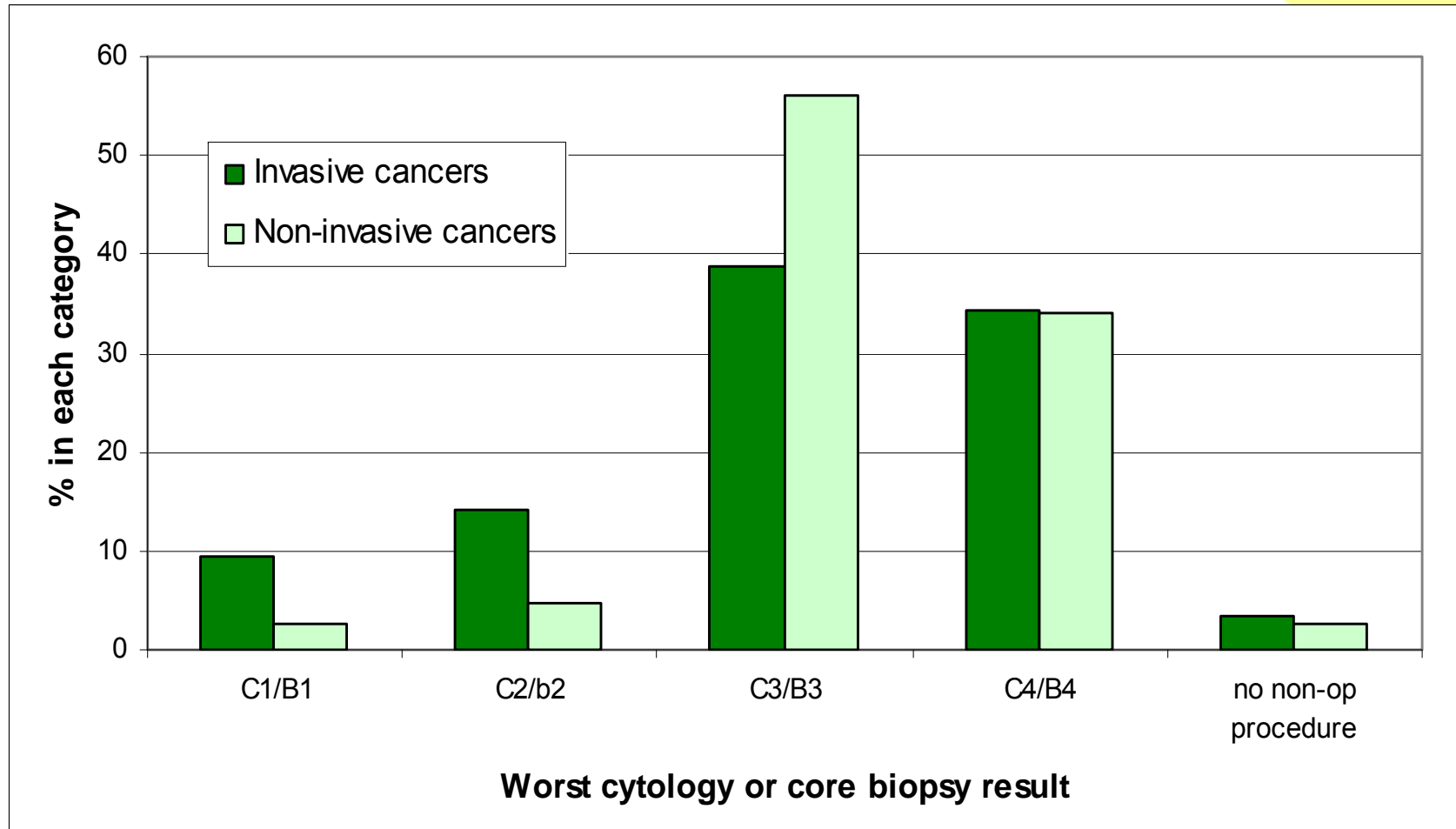


49 units lower than the 85% minimum standard; 74 units under 90% target

# Benign and malignant open biopsies



# Malignant open biopsies in 2007/08



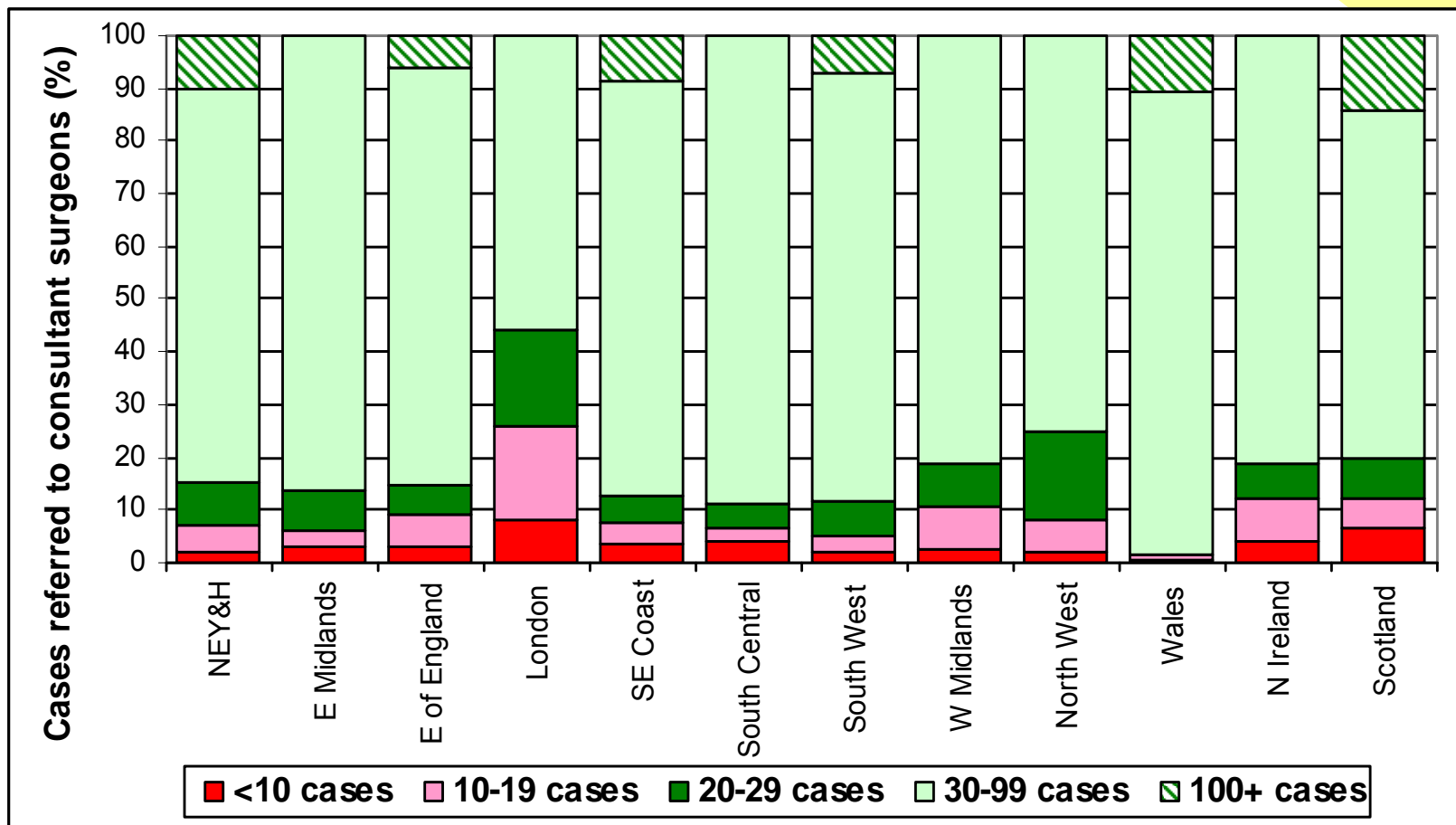
The majority of malignant open biopsies had a C3/B3 or C4/B4 non-operative cytology/biopsy result



**Surgery**  
**Mastectomy rates**  
**Immediate reconstruction**  
**Waiting times**

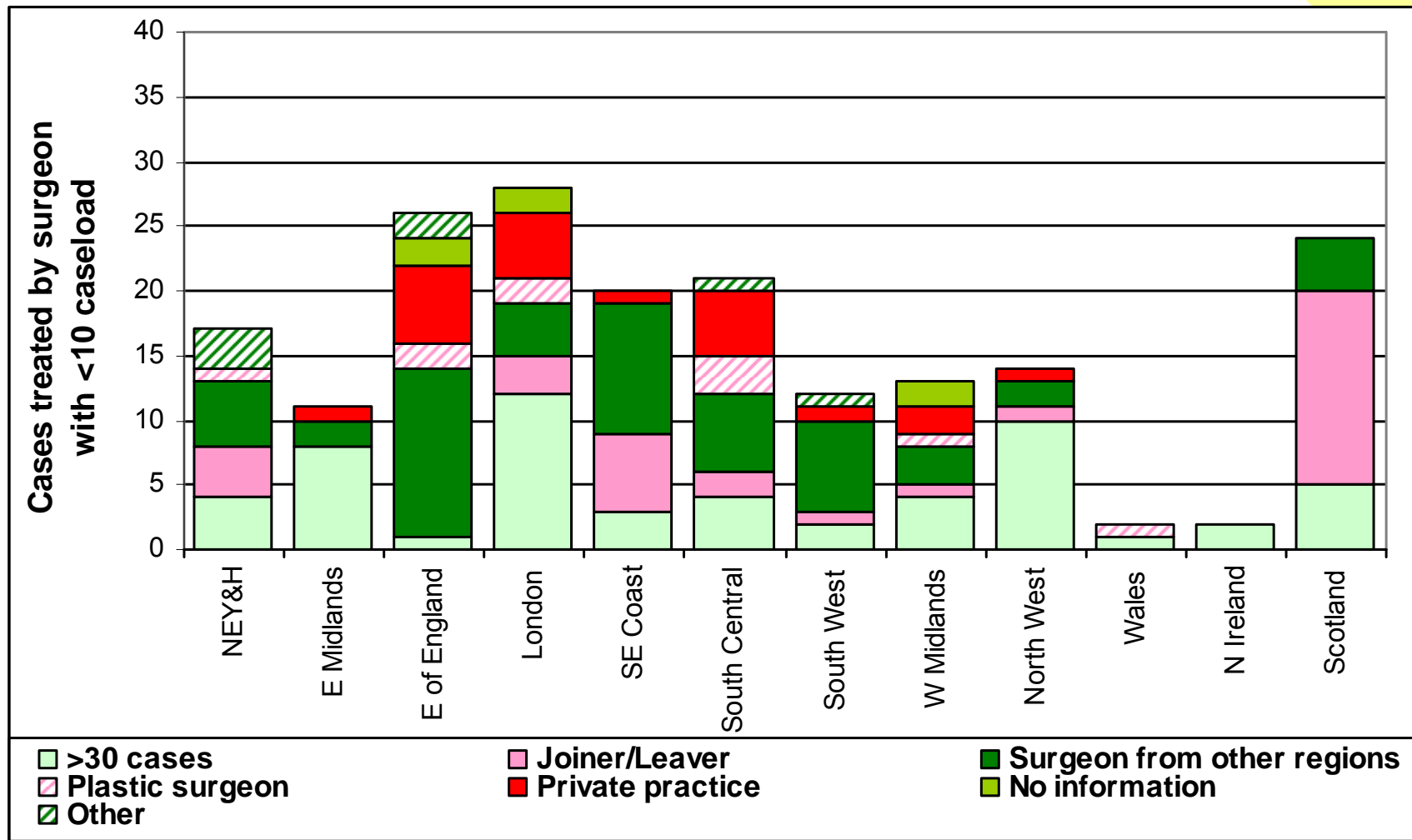
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# Women treated by surgeons with differing screening caseloads 2007/08



**New guidelines:** Each surgeon involved in the NHSBSP should maintain a surgical caseload of at least 10 screen-detected cancers per year, averaged over a three year period

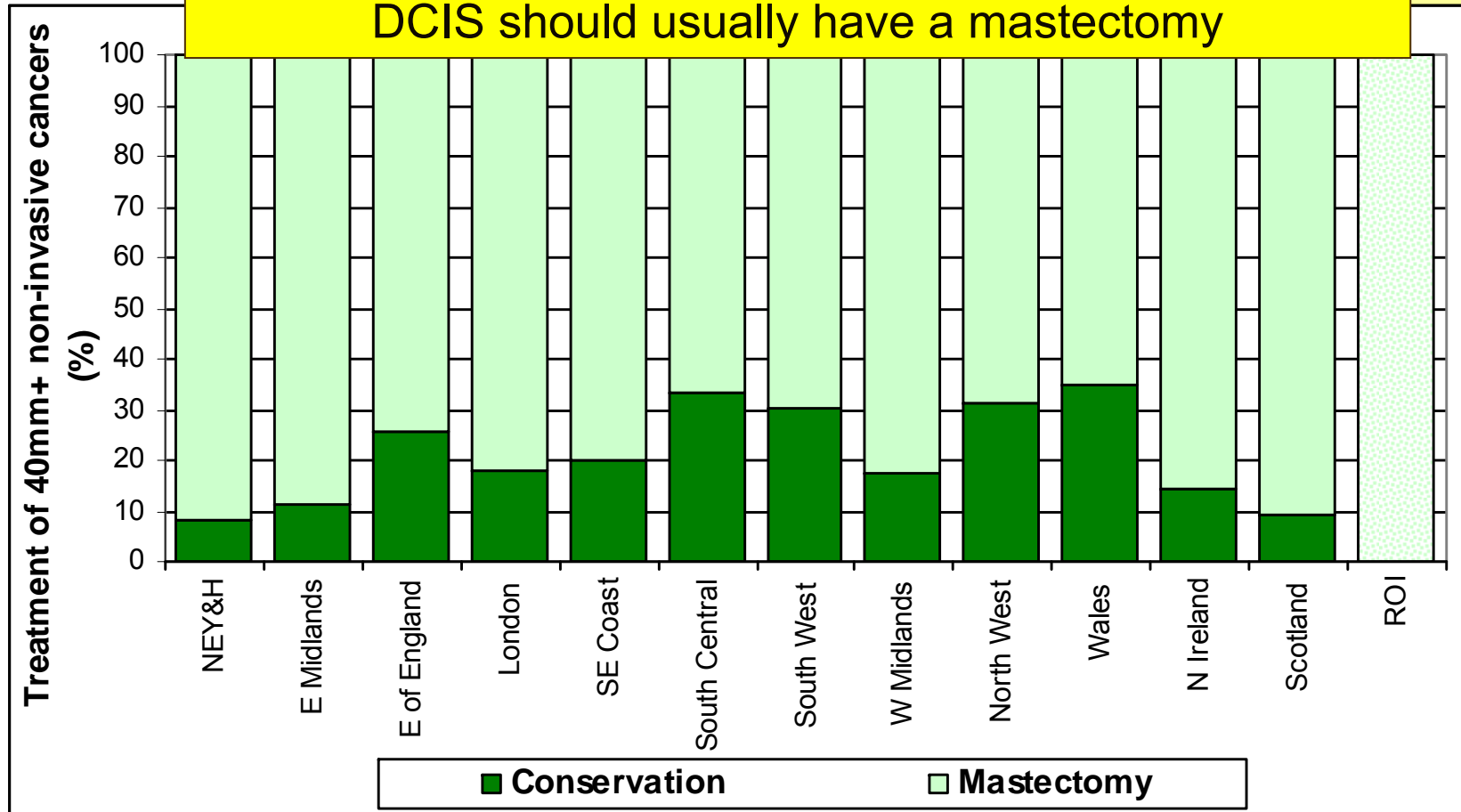
# Reasons provided by surgeons with caseloads <10 per year



# Treatment for non-invasive and micro-invasive cancers in each screening unit



**New guidelines: Patients with >40mm or multi-centric DCIS should usually have a mastectomy**

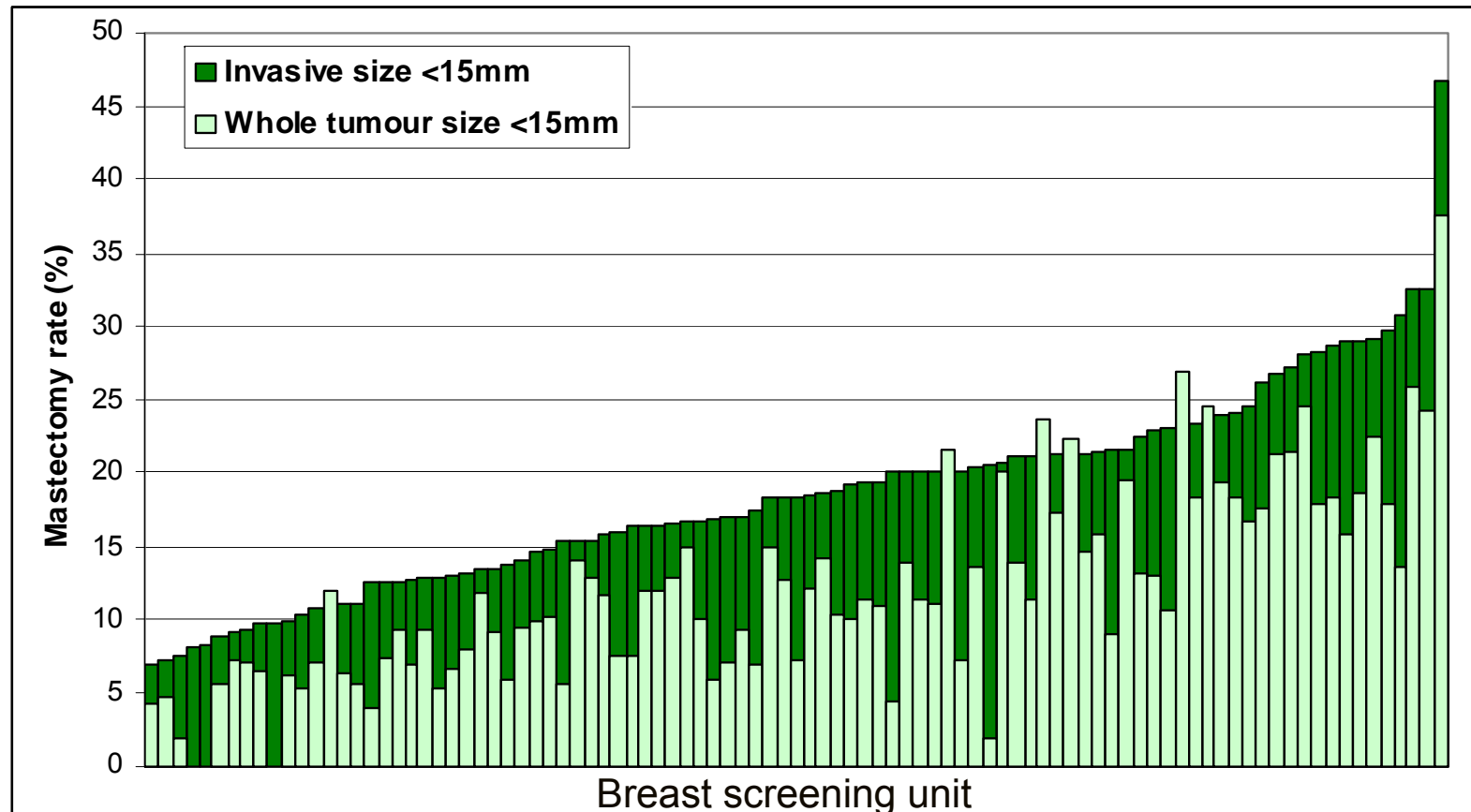


**Overall 19% of >40mm non-invasive cancers had breast conserving surgery.**

# Mastectomy rates for small (<15mm) invasive cancers

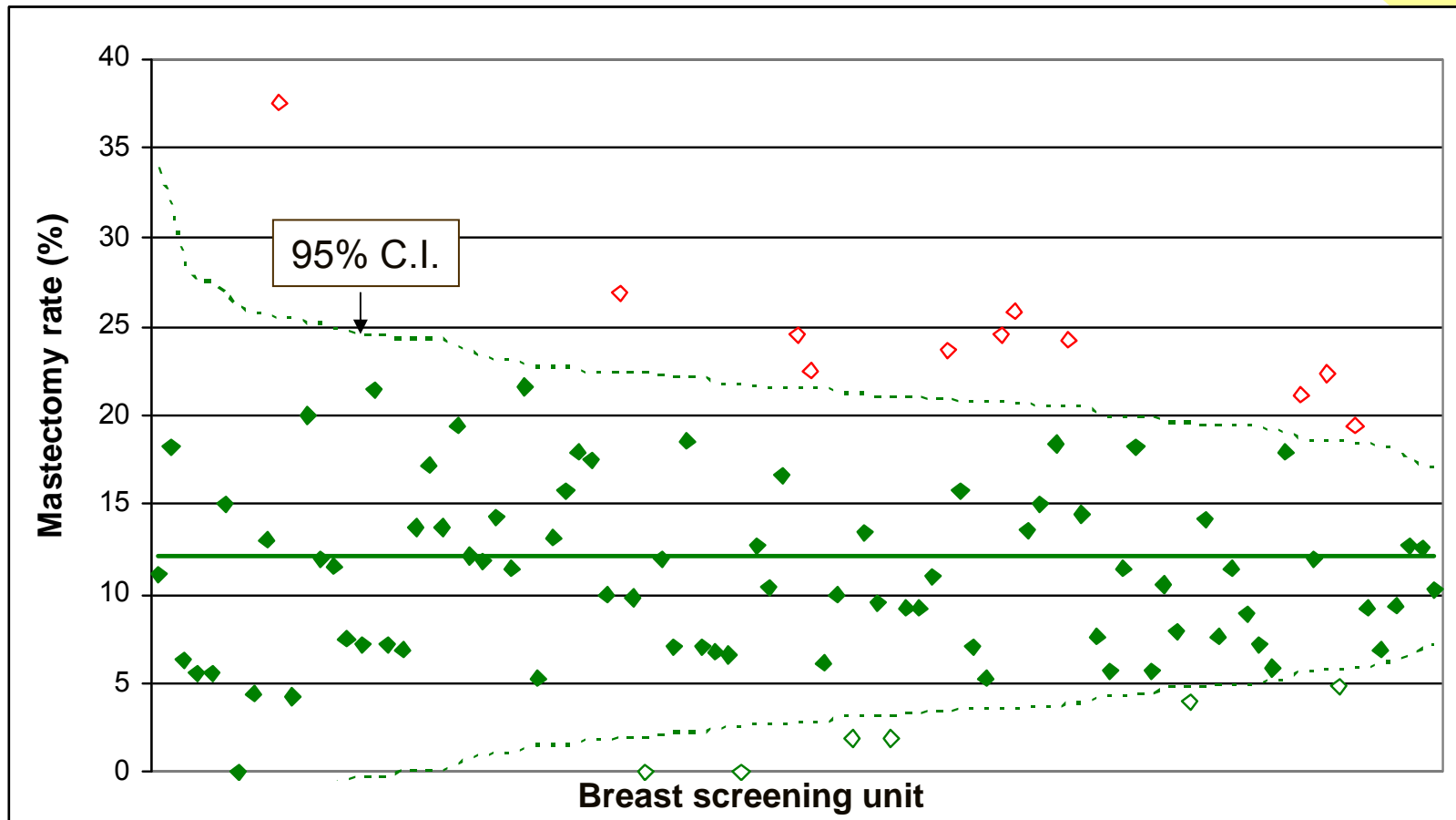


Overall 18% of cancers with invasive size <15mm and 12% of cancers with whole size <15mm had a mastectomy



10% of cases in London did not have a whole size recorded

# Mastectomy rates for small <15mm whole size invasive cancers

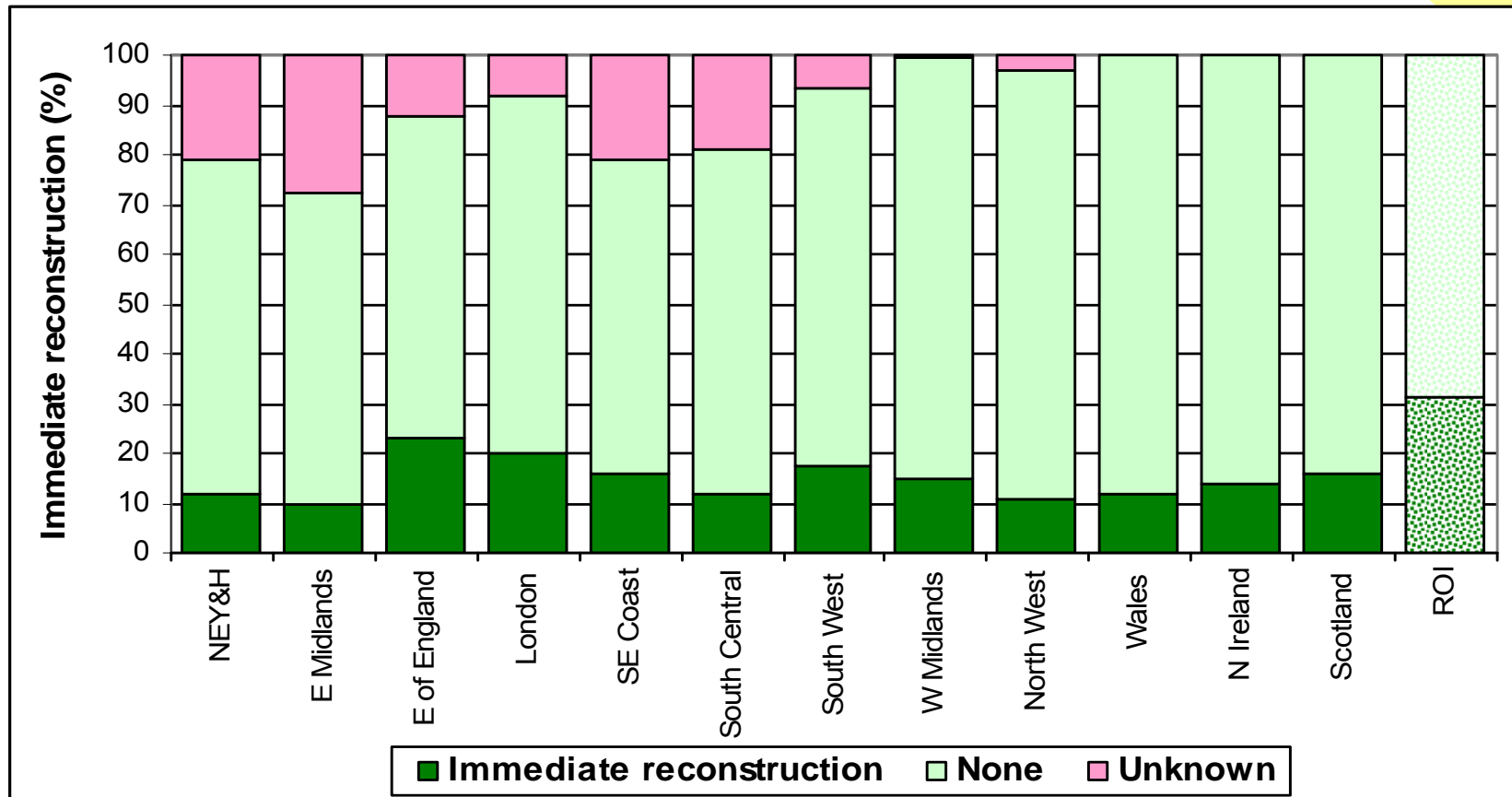


11 units lie above the upper control limit and 6 below the lower control limit

# Immediate reconstruction

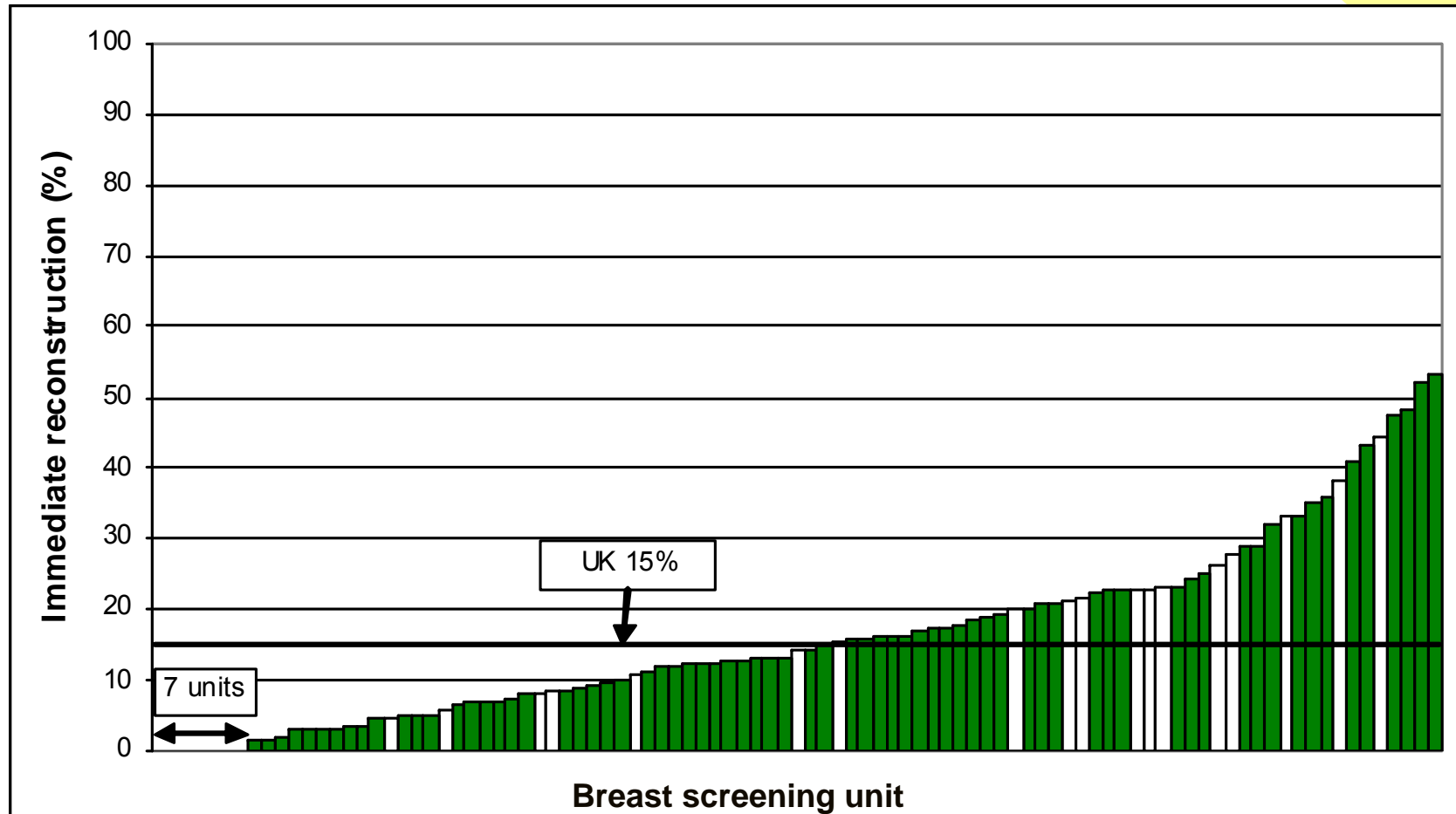


**New guidelines:** Patients should have access to breast reconstruction surgery



Overall in UK 15% of cases had immediate reconstruction recorded:  
 27% of non-invasive cancers and 11% of invasive cancers  
 In the Republic of Ireland 31% had immediate reconstruction

# Immediate reconstruction in screening units



# Immediate reconstruction rate for high mastectomy rate outliers



Region	Mastectomy rate (whole size <15mm)(%)	Reconstruction rate of all Mx cases (%)
East Midlands	37.50	4
East Midlands	26.83	8
North West	25.86	3
Scotland	24.56	7
North West	24.49	20
East Midlands	24.19	29
NEYH	23.64	18
West Midlands	22.45	7
Wales	22.33	7
North West	21.21	17
Wales	19.44	7

Most units with high mastectomy rates for small invasive cancers do not have high immediate reconstruction rates



# National Mastectomy and Breast Reconstruction Audit

A national audit of provision and outcomes of mastectomy and breast reconstruction surgery for women in England and Wales

In partnership with:

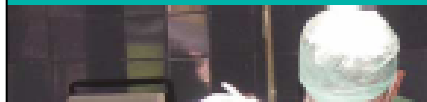


The Royal College of Surgeons in England



*"The ABS has a proud tradition of audit in breast cancer. The MBR audit is a unique, challenging and difficult audit which will benefit future generations of women with breast cancer. I urge you to support it."*

**Mr Hugh Bishop, ABS at BASO**

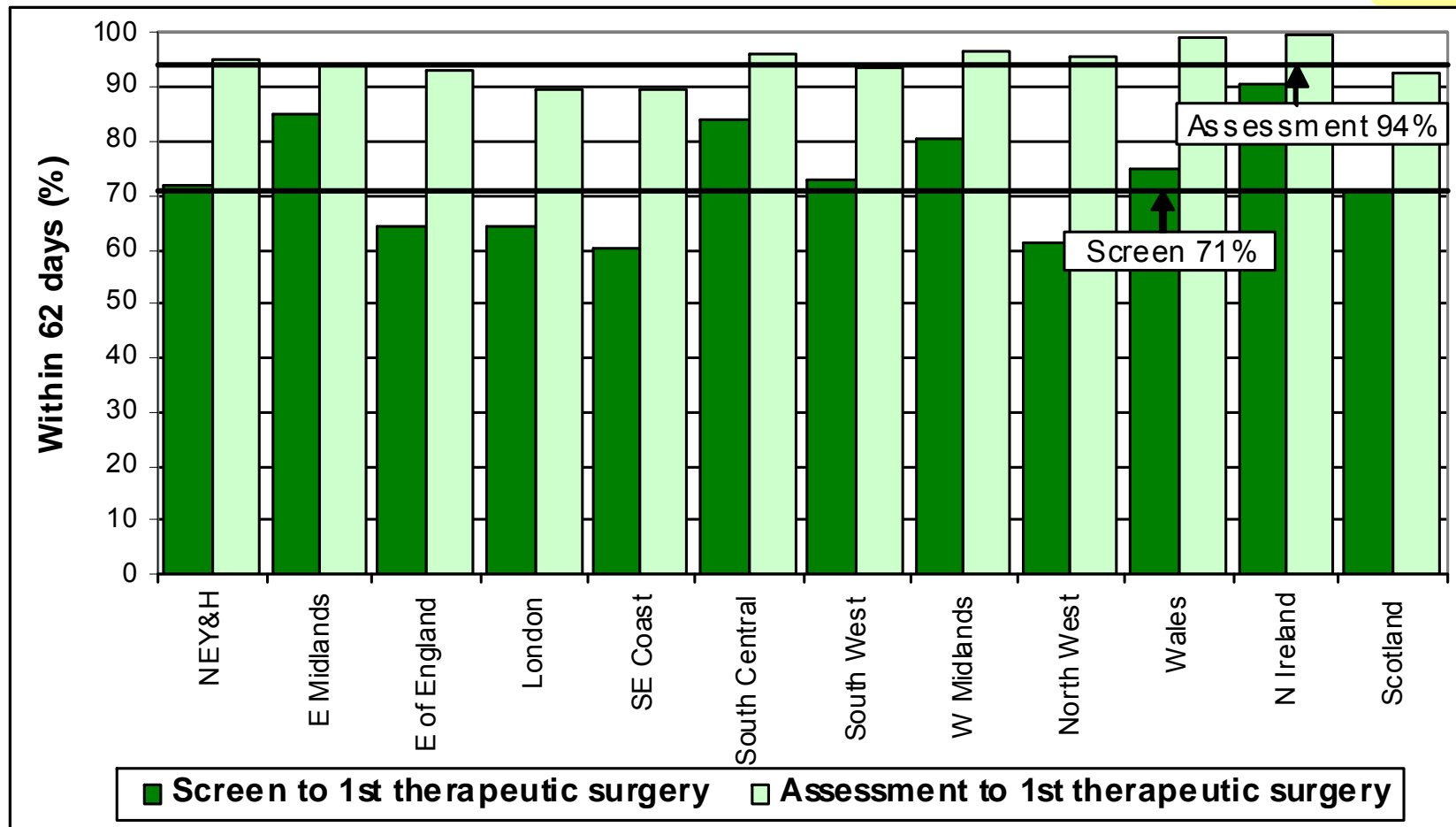


# Waiting times from referral to first treatment



- 62 day cancer waiting time:
  - Screening cases will be included from **1 January 2009**
  - Measured from 'date of last read' to 'start date of first treatment'
  - New 'unadjusted' performance standard = **97%**
  - Deadline for January data = **6 March 2009**
- 'Date of last read' will lie between the current screen date and assessment date
- Currently, there is no record of 'date of last read' in the NHSBSP/ABS at BASO screening audit
- GFoCW includes recurrences and dates of all types of treatment

# Waiting times from referral to first treatment (62 day waits) 2007/08



Only possible for two regions to meet the new 97% 62 day standard



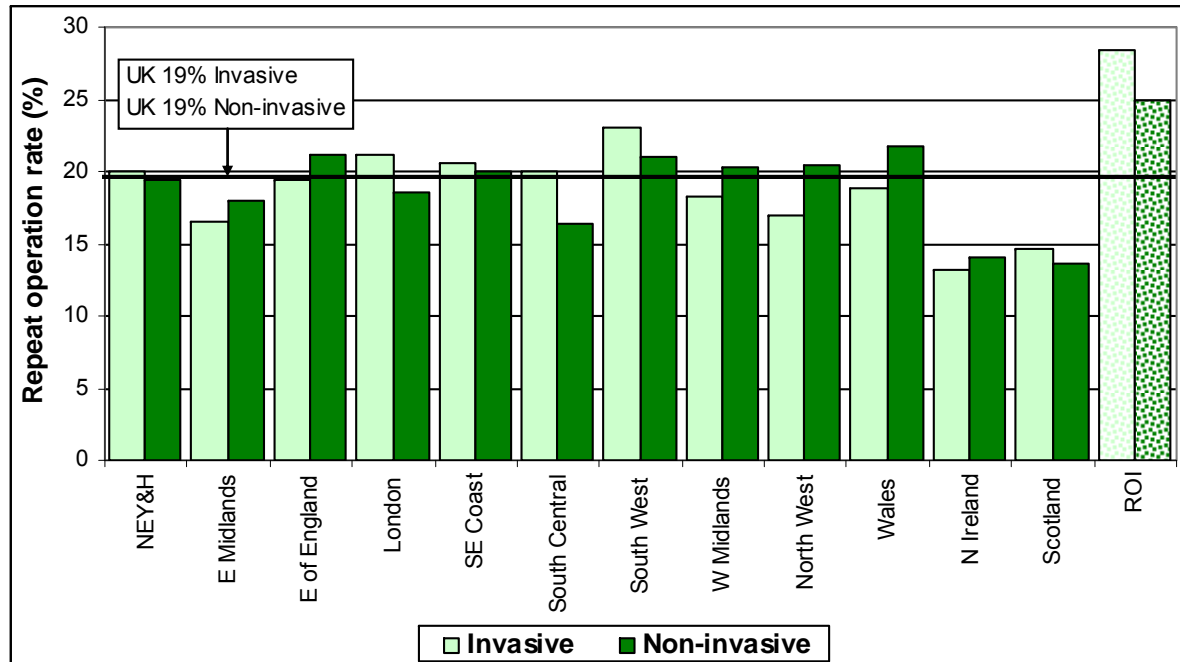
# Surgery

## Repeat operations

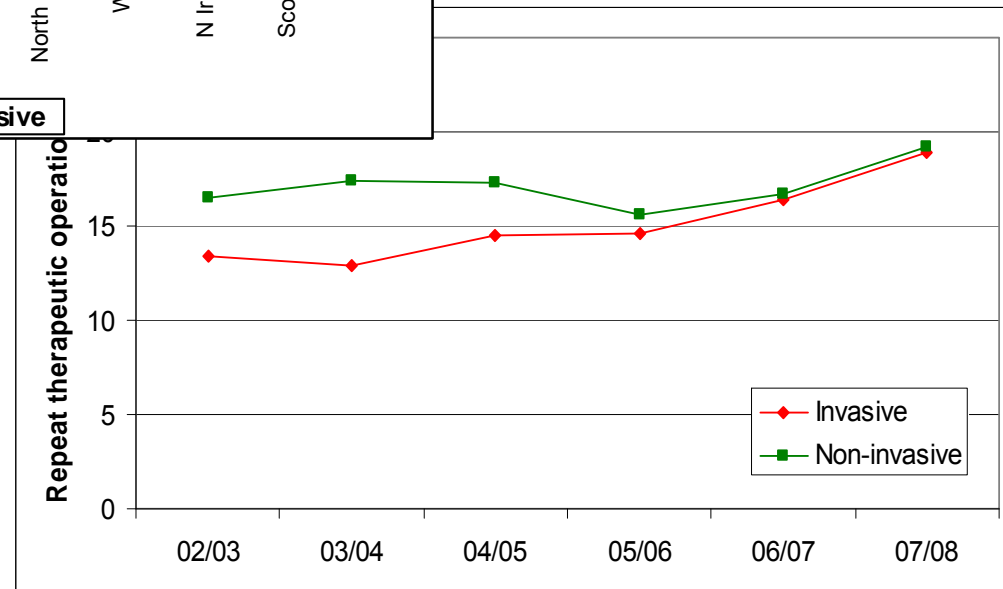
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# Repeat operation rates



In 2006/07 the repeat operation rate was 16% for invasive cancers and 17% for non-invasive cancers

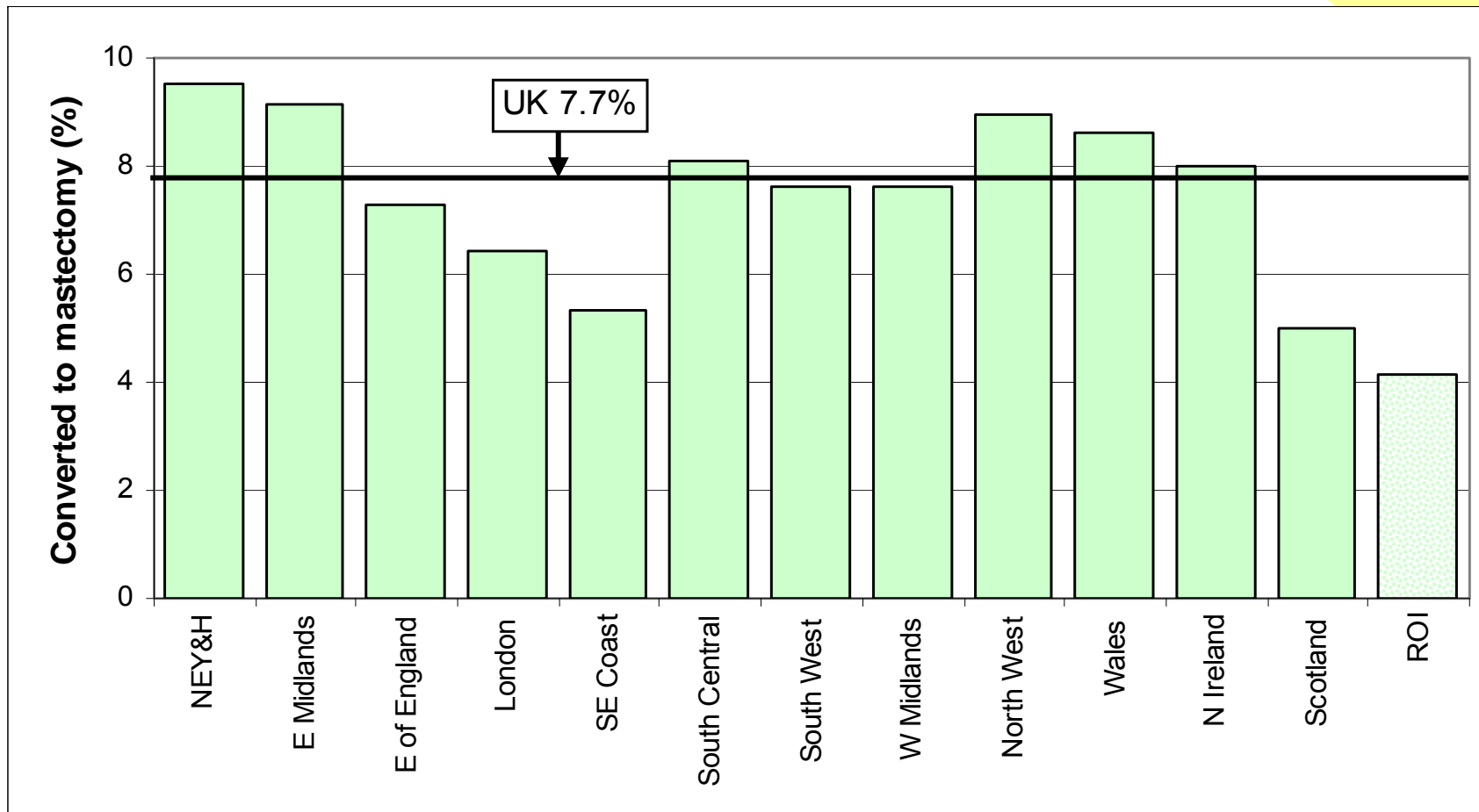


# Types of repeat operation



Non-operative diagnosis result	No. with repeat operation(s) (%)	No. with mastectomy at 1st operation (%)	No. with initial breast conserving surgery converted to mastectomy (%)	No. with repeat breast conserving surgery (%)	No. with axillary surgery at 1st operation (%)	No. with axillary surgery at later operation (%)	No. with no axillary operation (%)
B5b invasive	1894 (17)	2313 (20)	561 (6)	853 (10)	11044 (99)	43 (0)	120 (1)
C5 only	142 (20)	97 (14)	41 (7)	71 (12)	677 (96)	8 (1)	18 (3)
B5a confirmed non-invasive or micro-invasive	629 (23)	660 (23)	219 (10)	375 (18)	739 (26)	130 (5)	1917 (69)
B5a found to be invasive at surgery	433 (54)	253 (32)	114 (21)	146 (27)	398 (50)	341 (43)	60 (8)

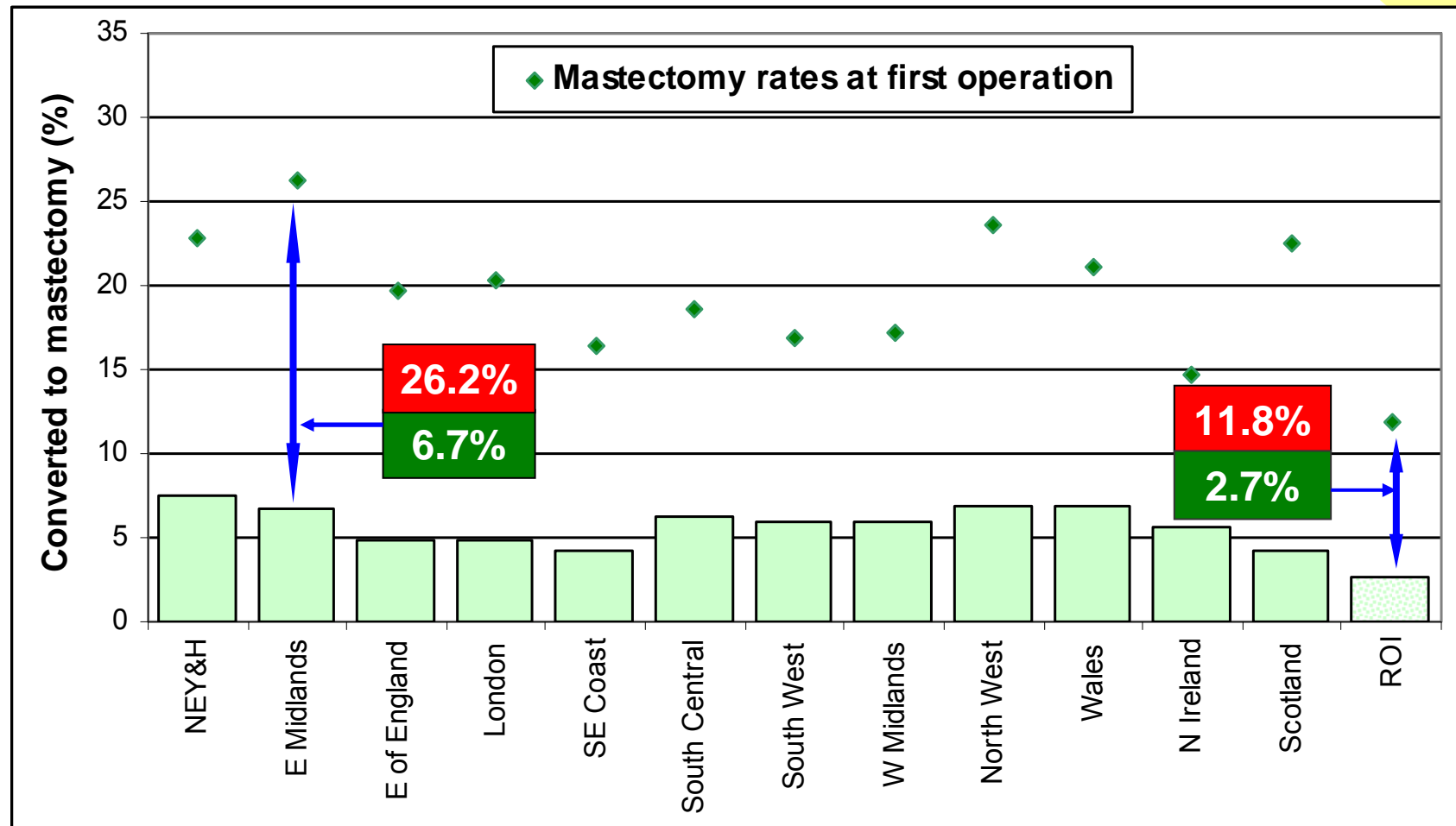
# All cancers initially treated with BCS and then converted to mastectomy



**New guideline:** patients undergoing breast conserving surgery should have no more than 3 therapeutic operations - min std >95%; target 100%

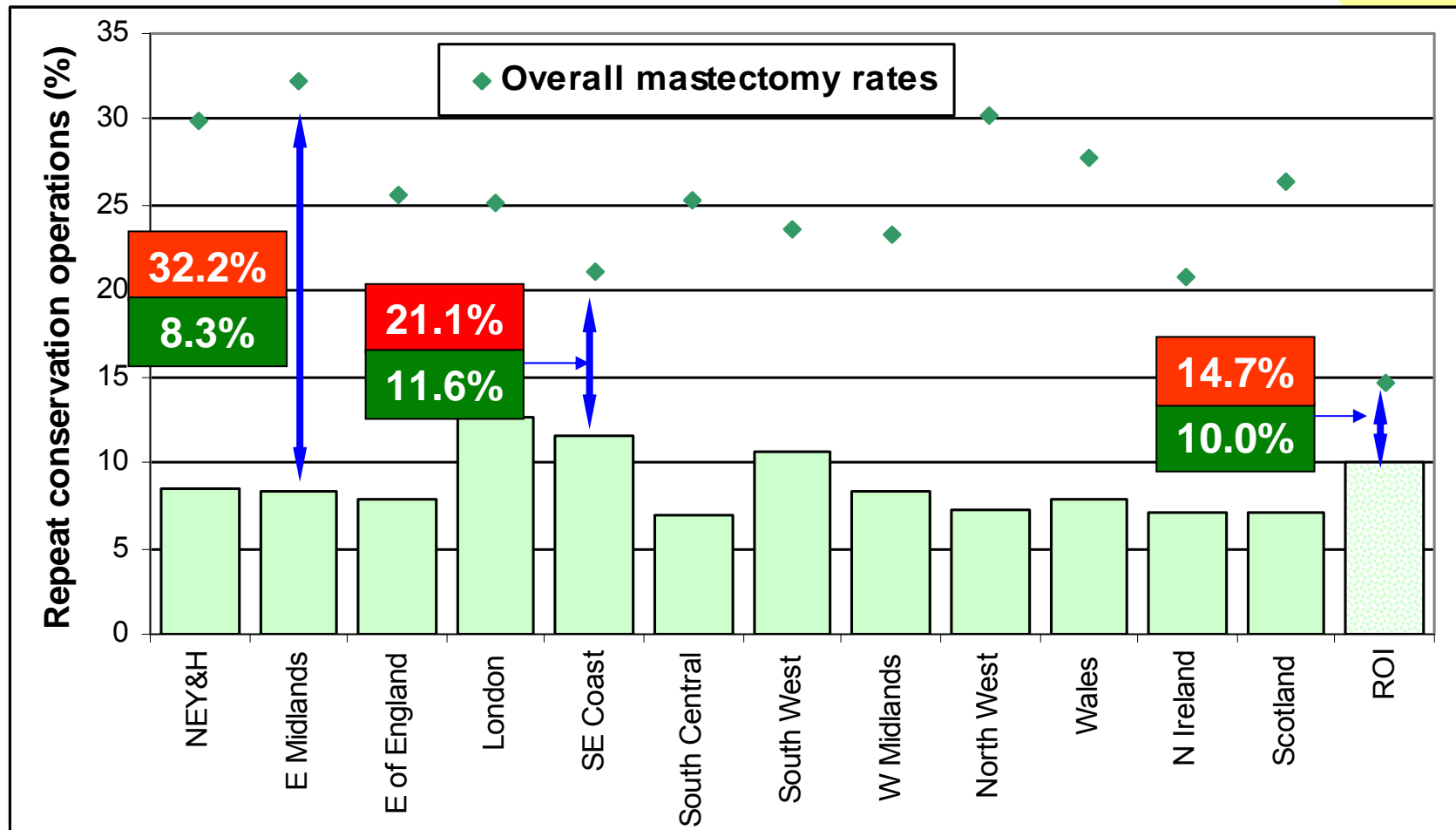
Now slide 30

# Breast conserving surgery converted to mastectomy – invasive cancers



UK average = 6%

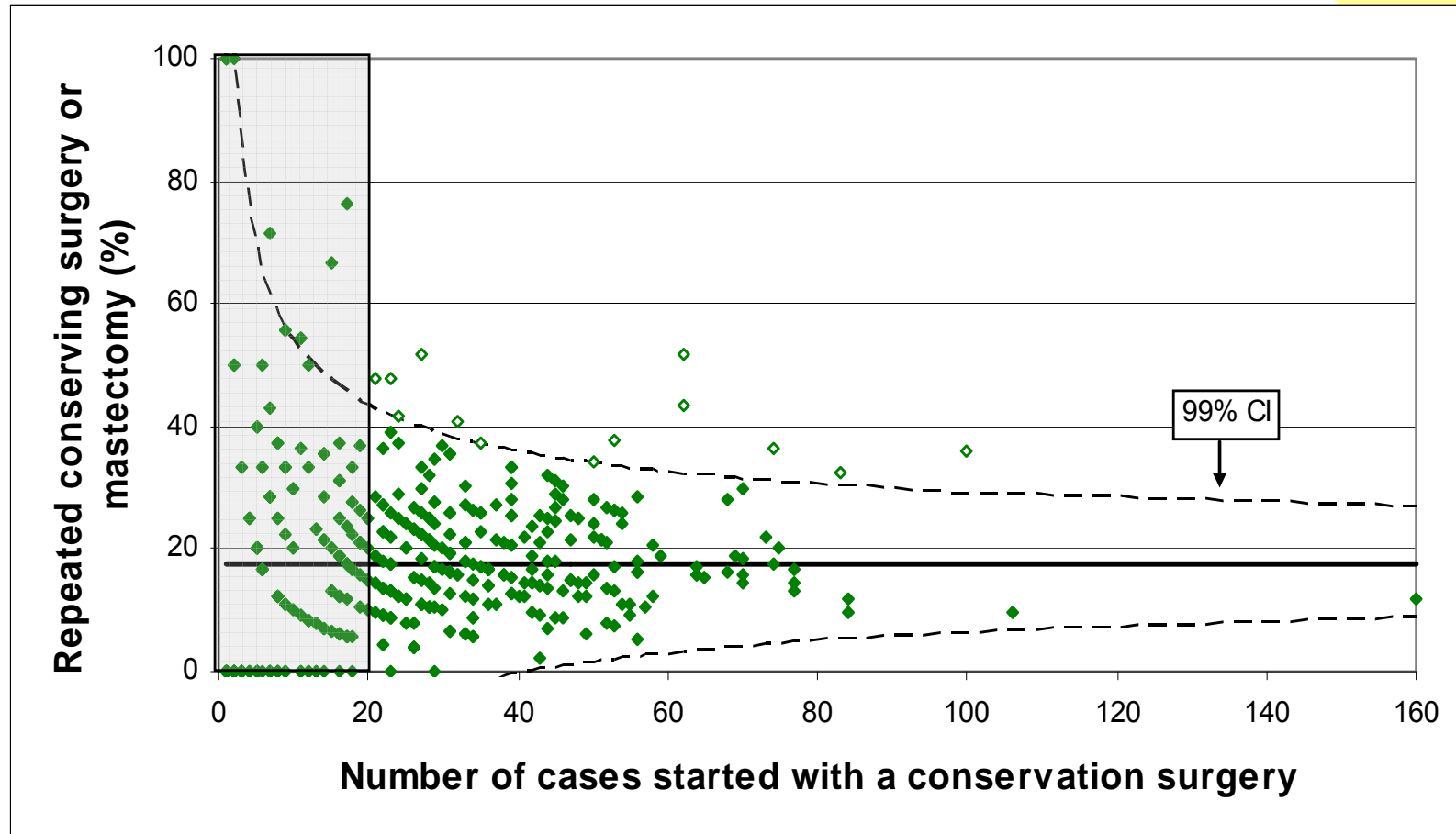
# Repeat breast conserving surgery to clear margins - invasive cancers



UK average = 9%

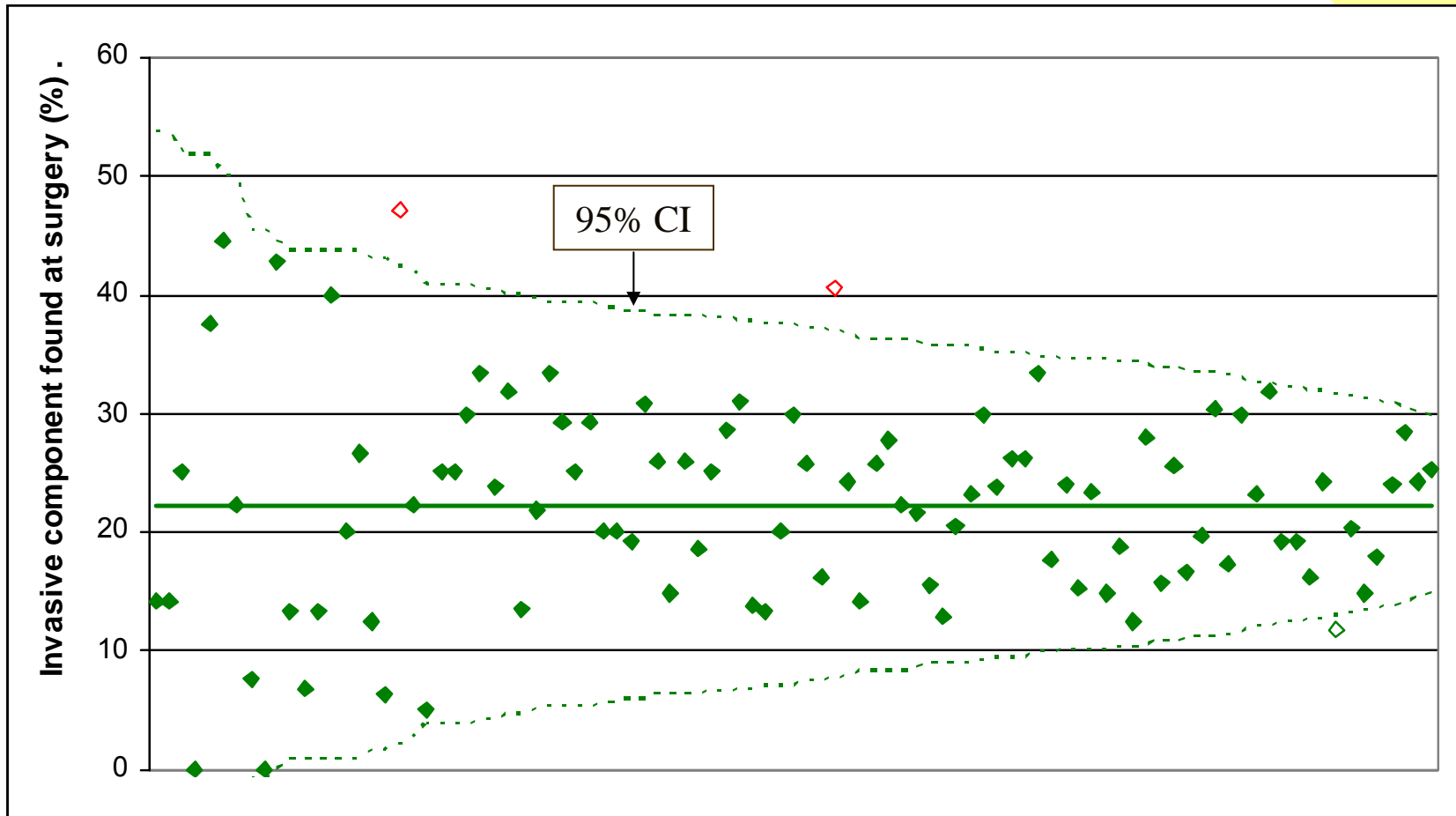
Now slide 32

# Repeat operations - surgical variation



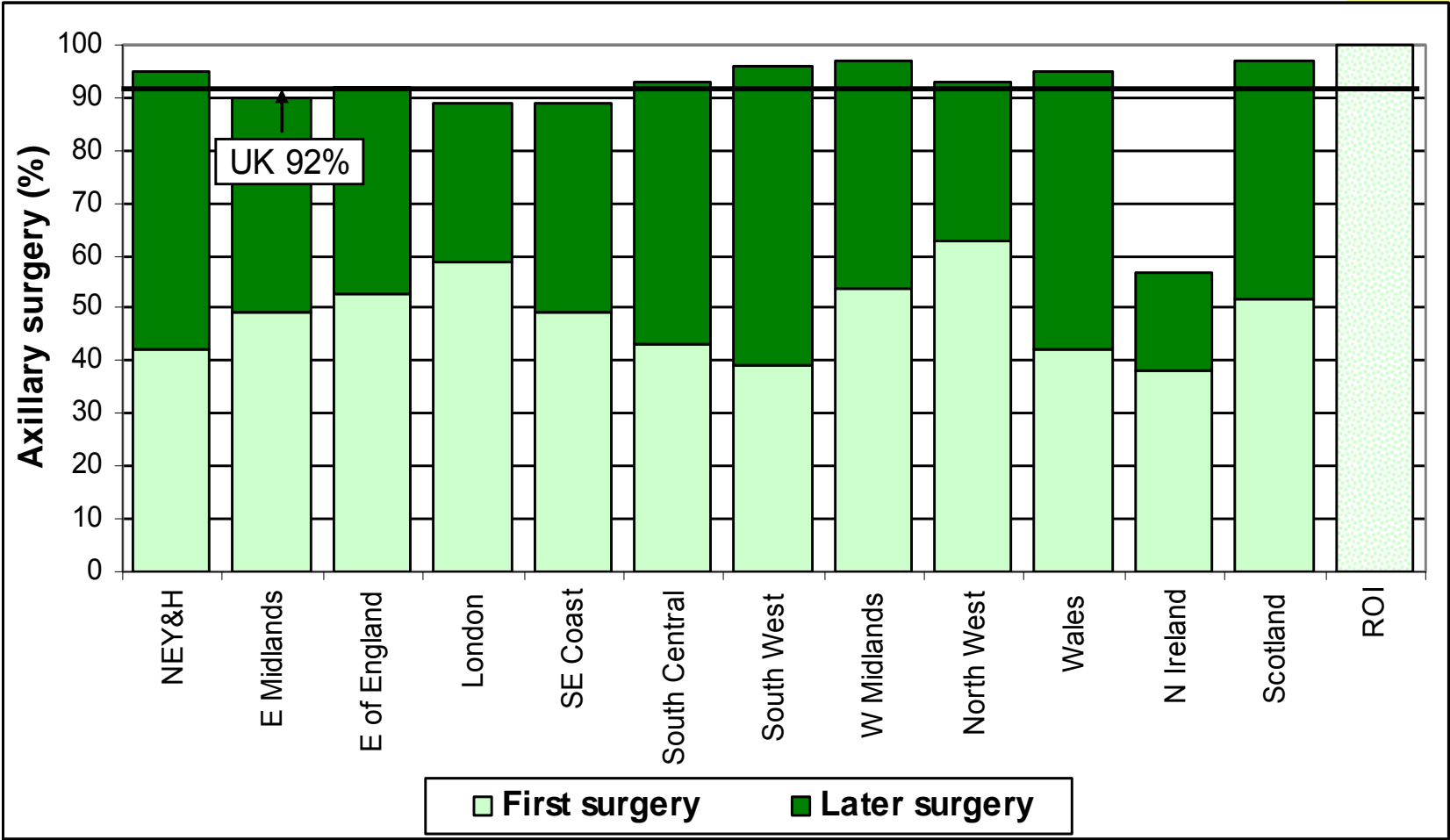
310 surgeons had more than 20 cases with BCS as the first operation  
13 surgeons lie above the upper control limit

# Cancers with B5a non-operative diagnosis found to be invasive at surgery



Now slide 34

# B5a (invasive) cancers having axillary surgery at first or repeat operations

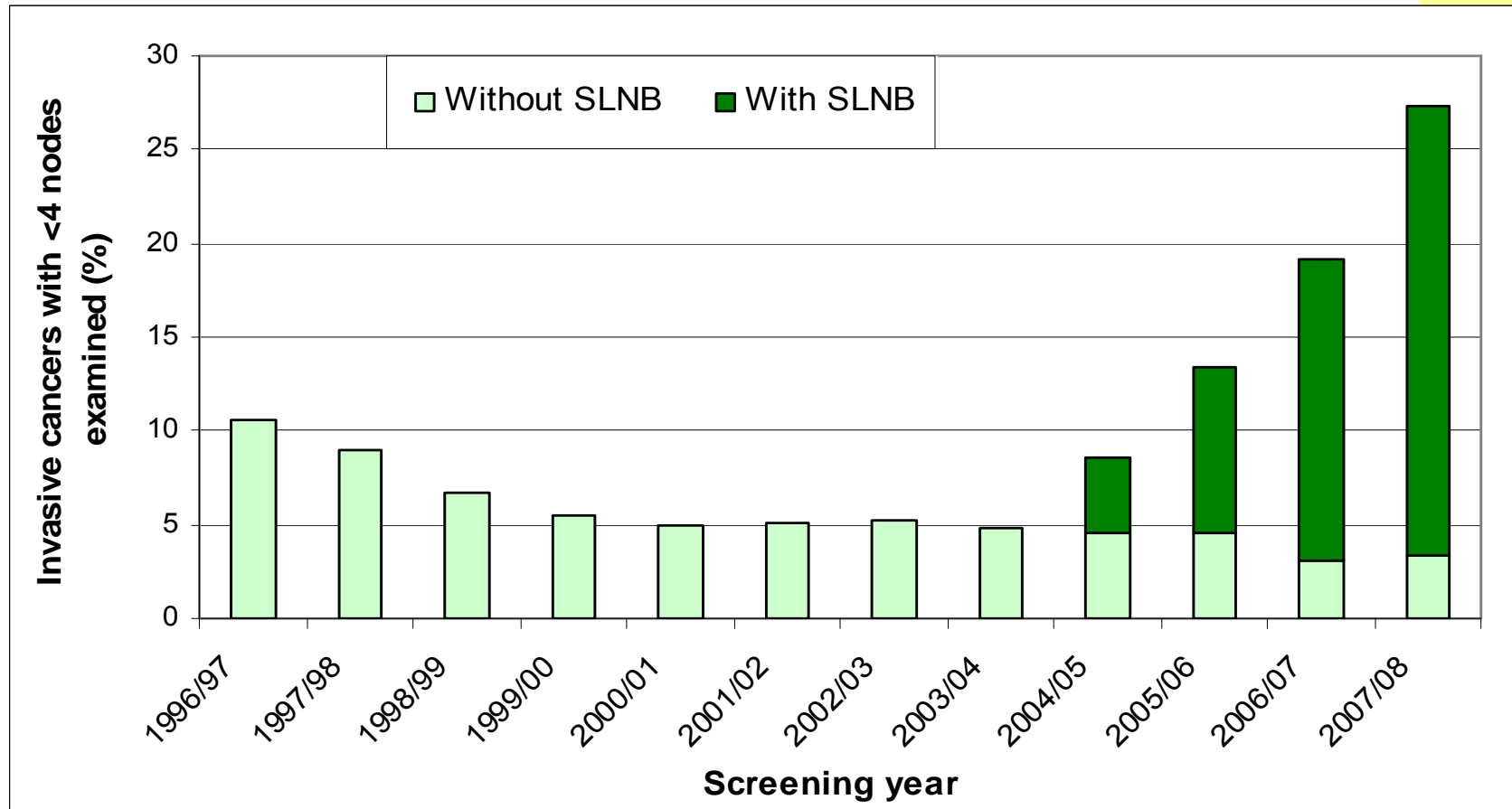


In N Ireland 9/21 cases have no axillary surgery recorded

# Invasive cancers with <4 nodes examined



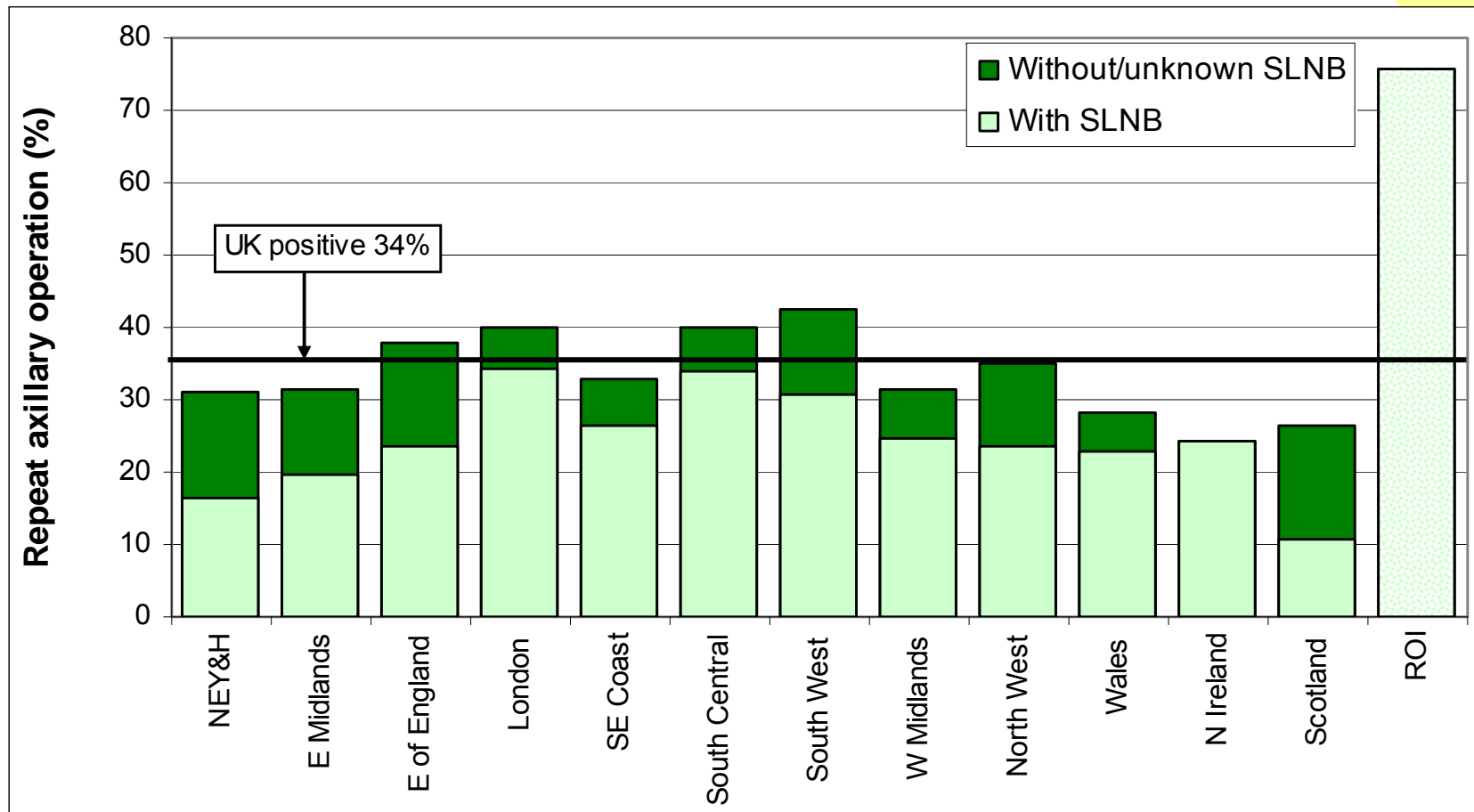
**New guidelines:** When axillary node sampling is carried out at least 4 nodes should be retrieved - min std >90%; target 100%



SLNB type (% of cases with nodal assessment): 26% isotope and blue dye, 4% blue dye only, 0% isotope only and 14% unknown type

# Repeat axillary operations

– invasive cancers with positive nodal status having BCS as 1st operation



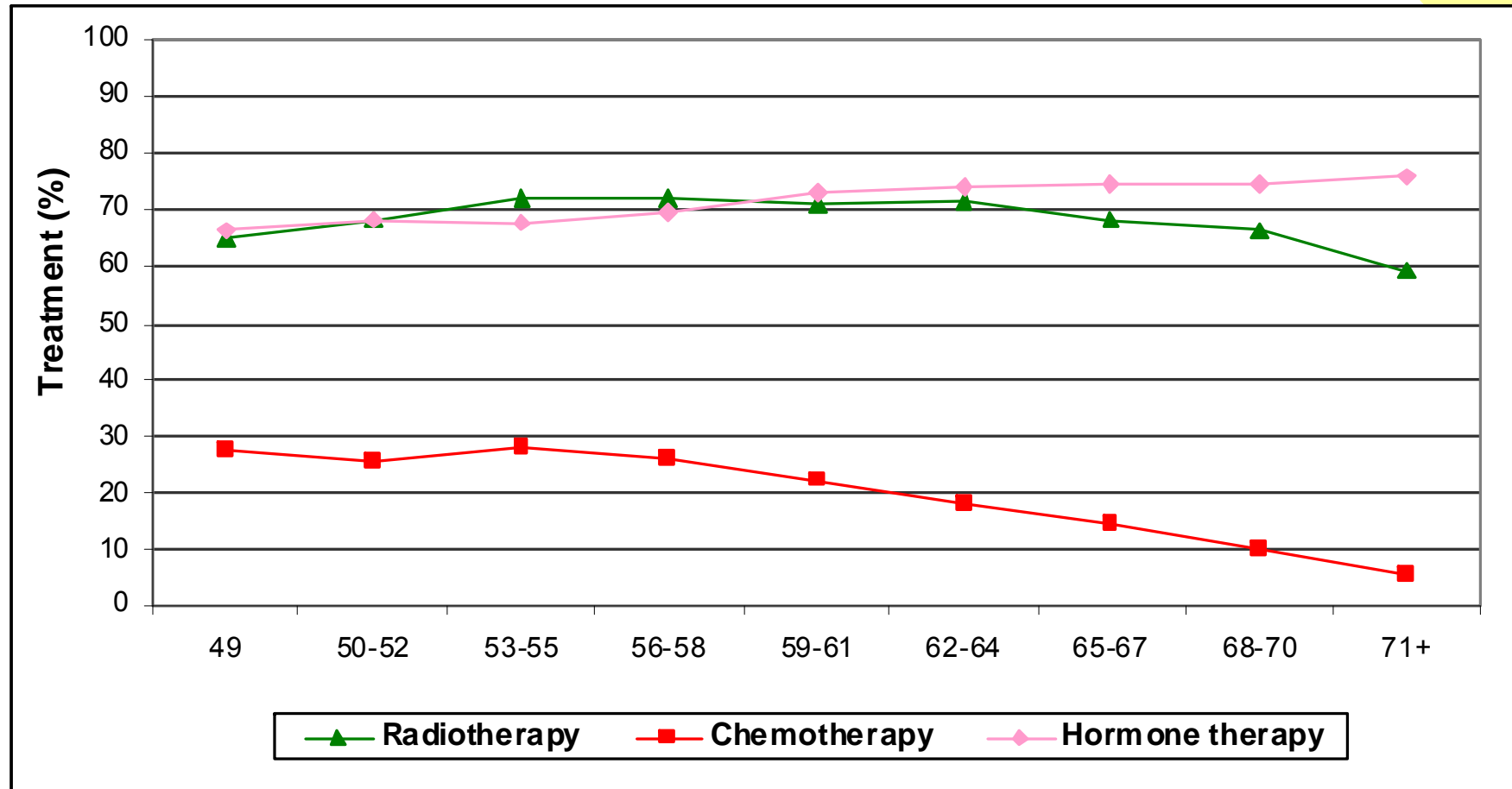
In the UK 1% of node negative cases had a repeat operation



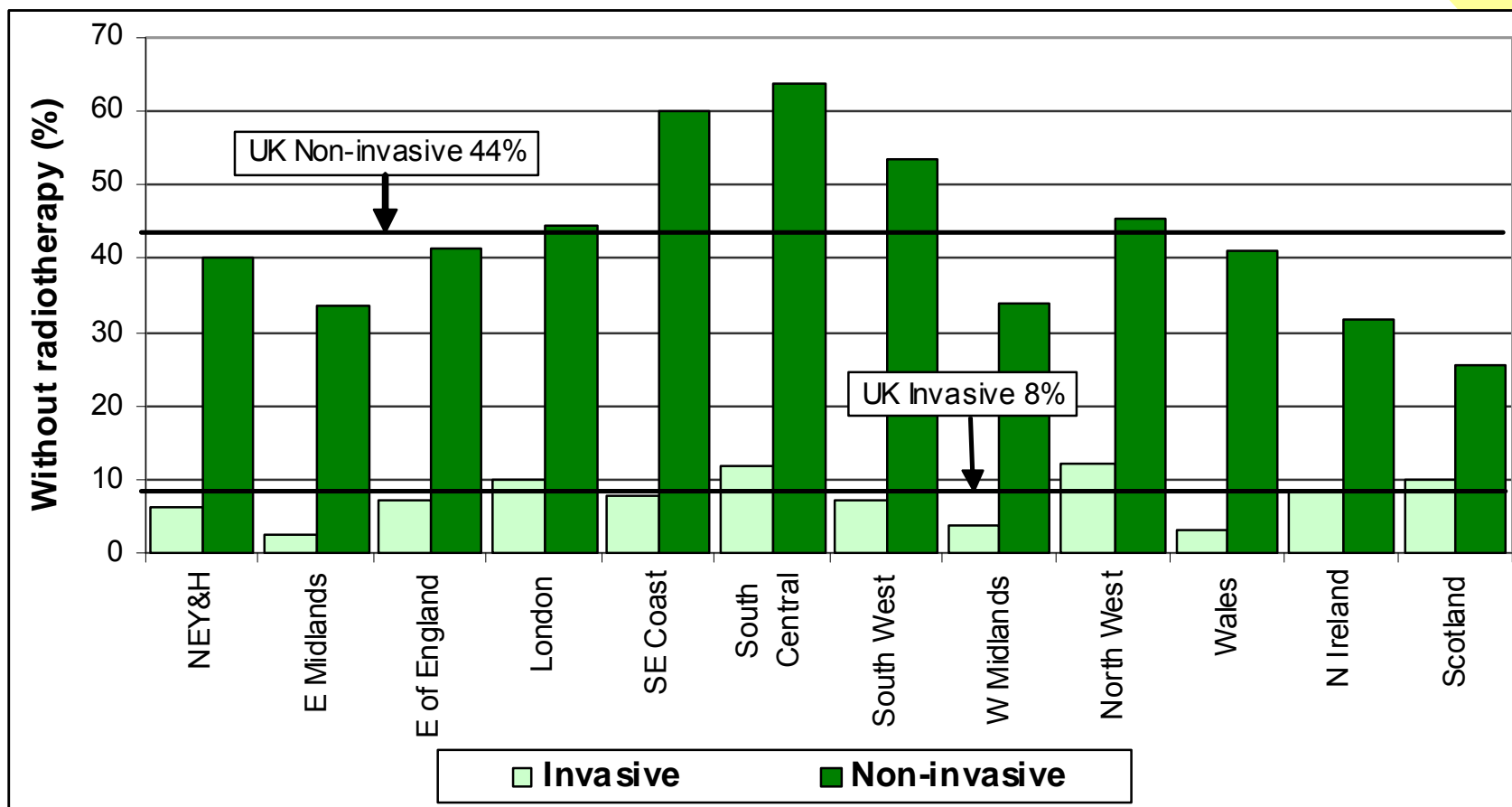
# Adjuvant Treatment

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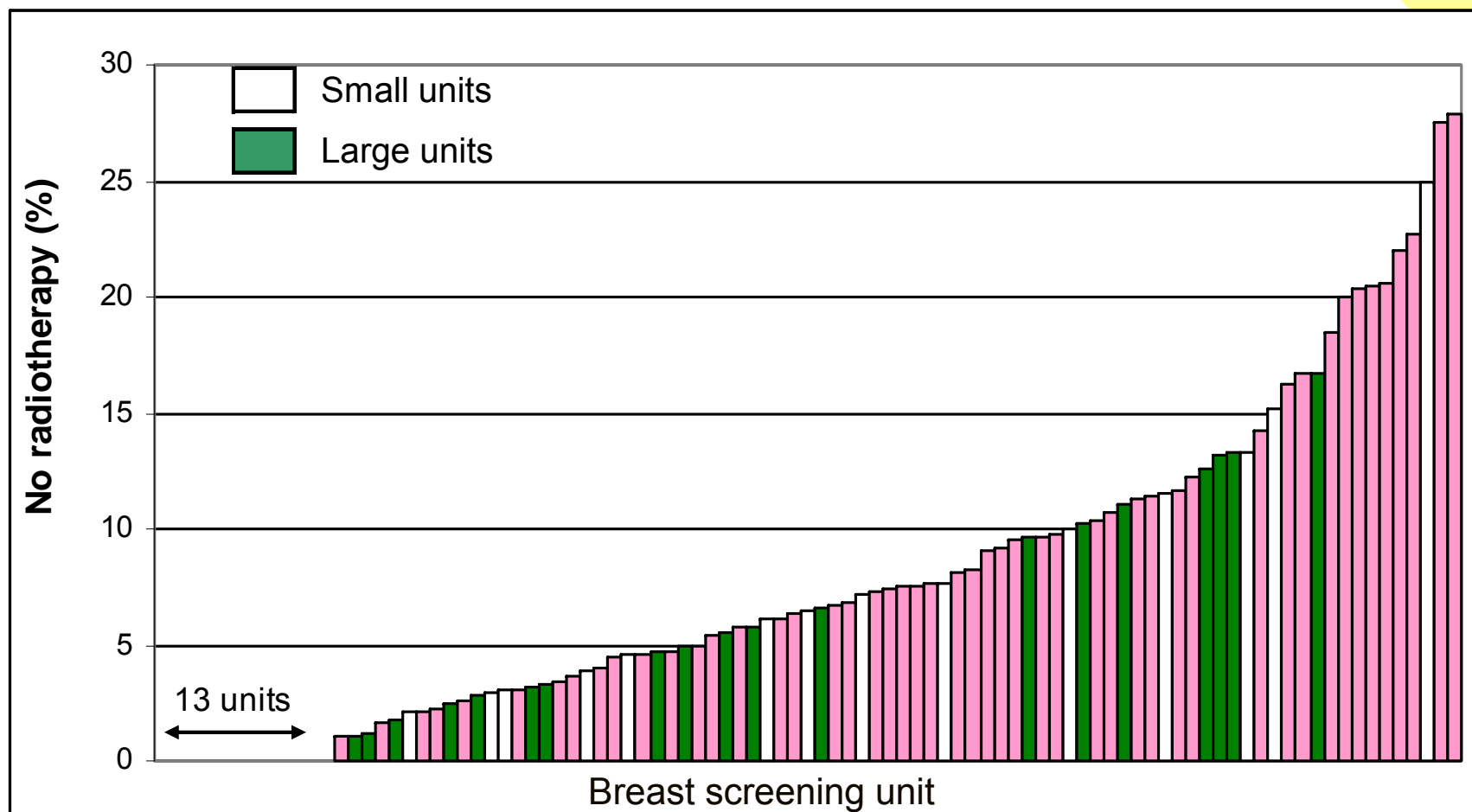
# Variation in adjuvant treatment with age at diagnosis



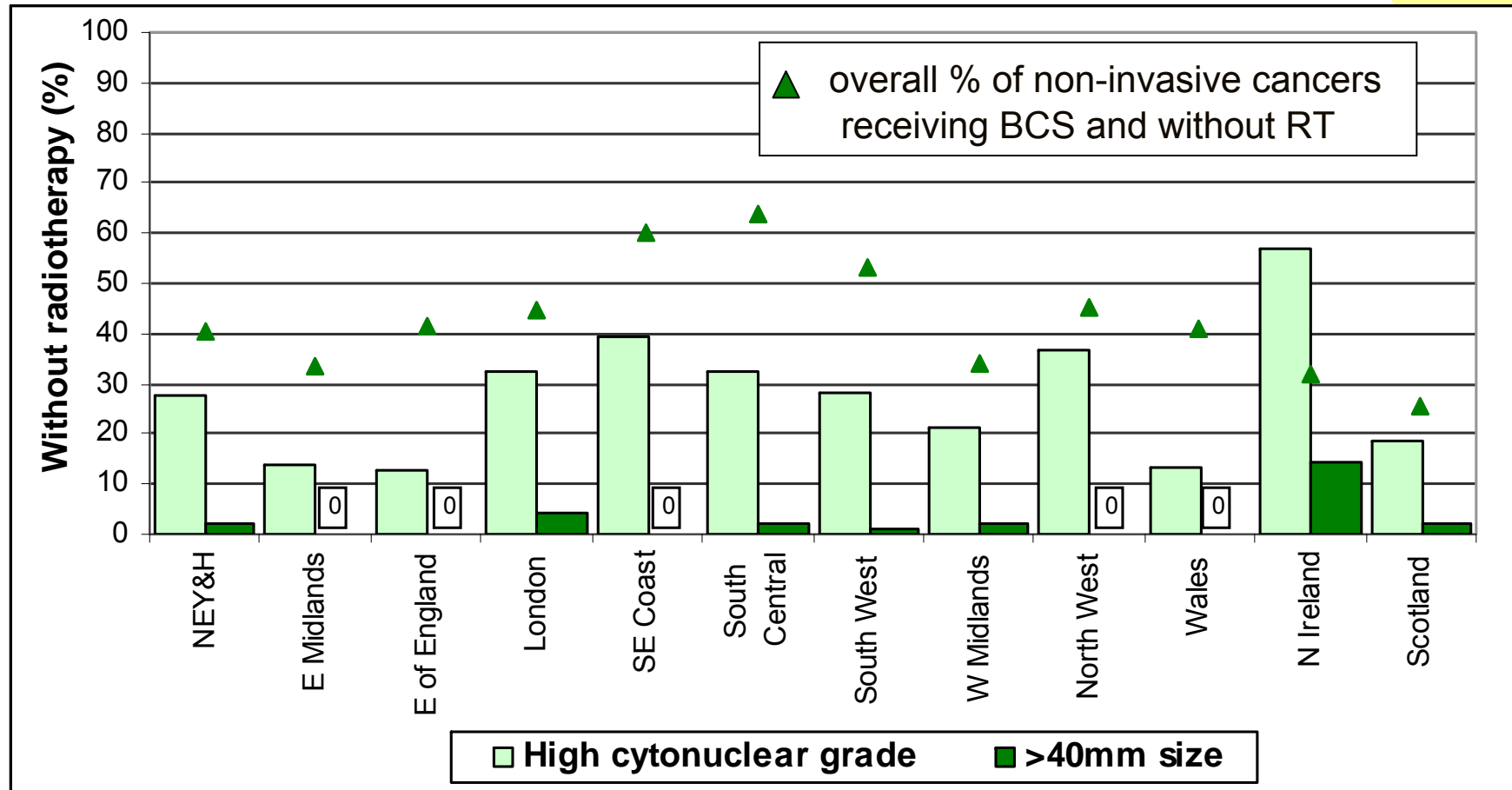
# Cancers treated with BCS with no RT recorded



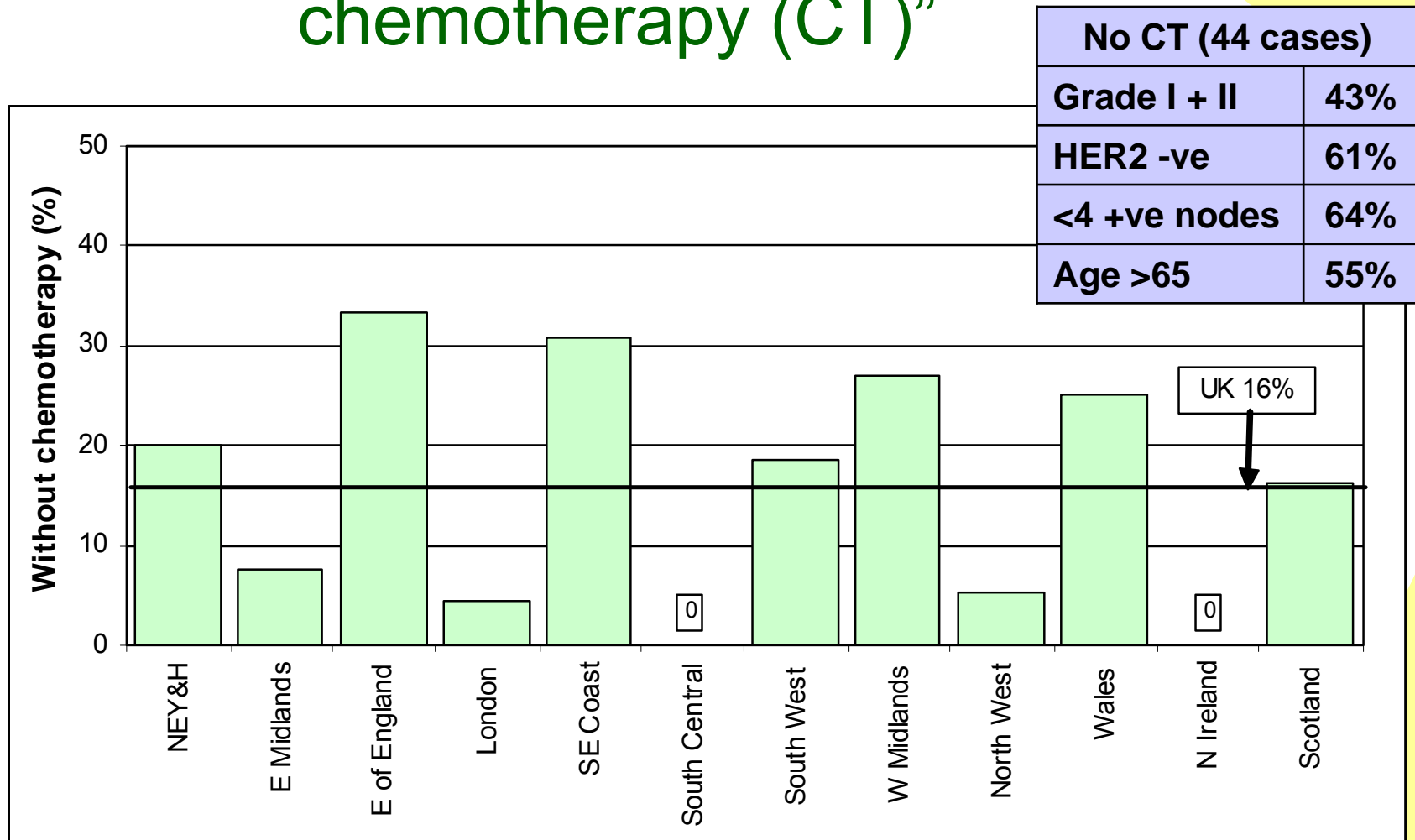
# Invasive BCS with no RT recorded - variation between screening units 2006/07



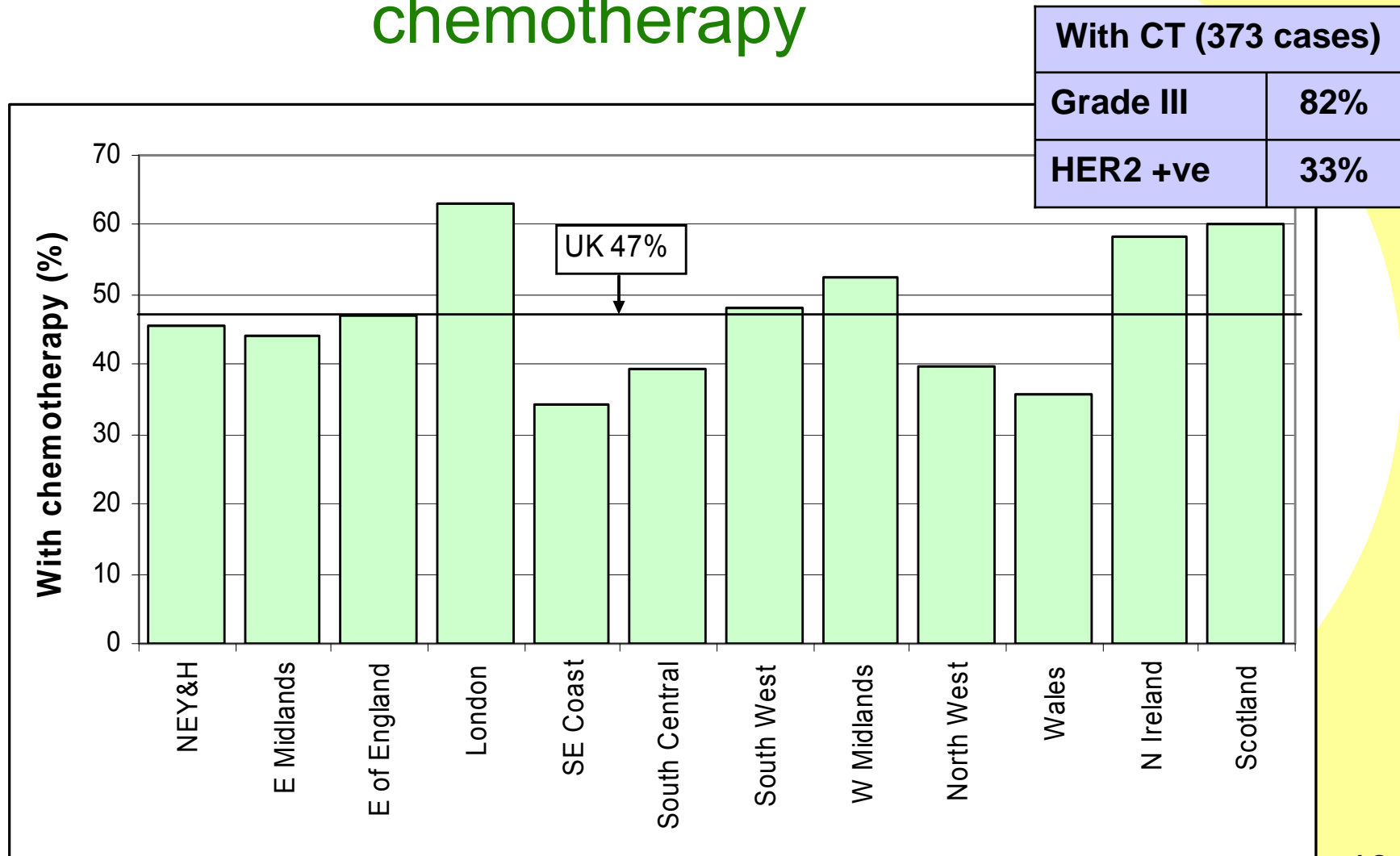
# Non-invasive cancers treated with BCS with no RT recorded



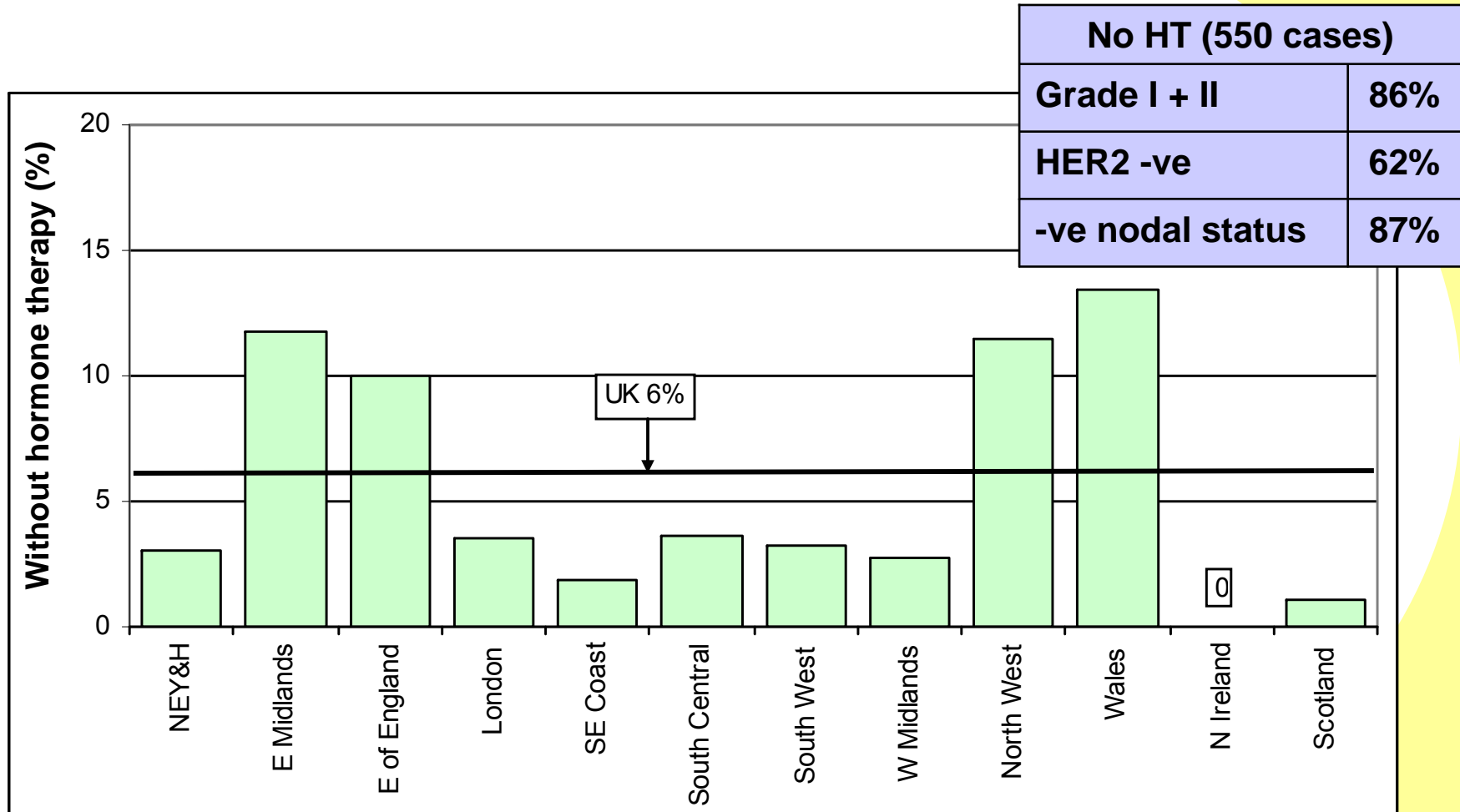
# “Women with ER negative, node positive cancers should normally receive chemotherapy (CT)”



# “Women with ER negative, node negative invasive cancers treated with chemotherapy

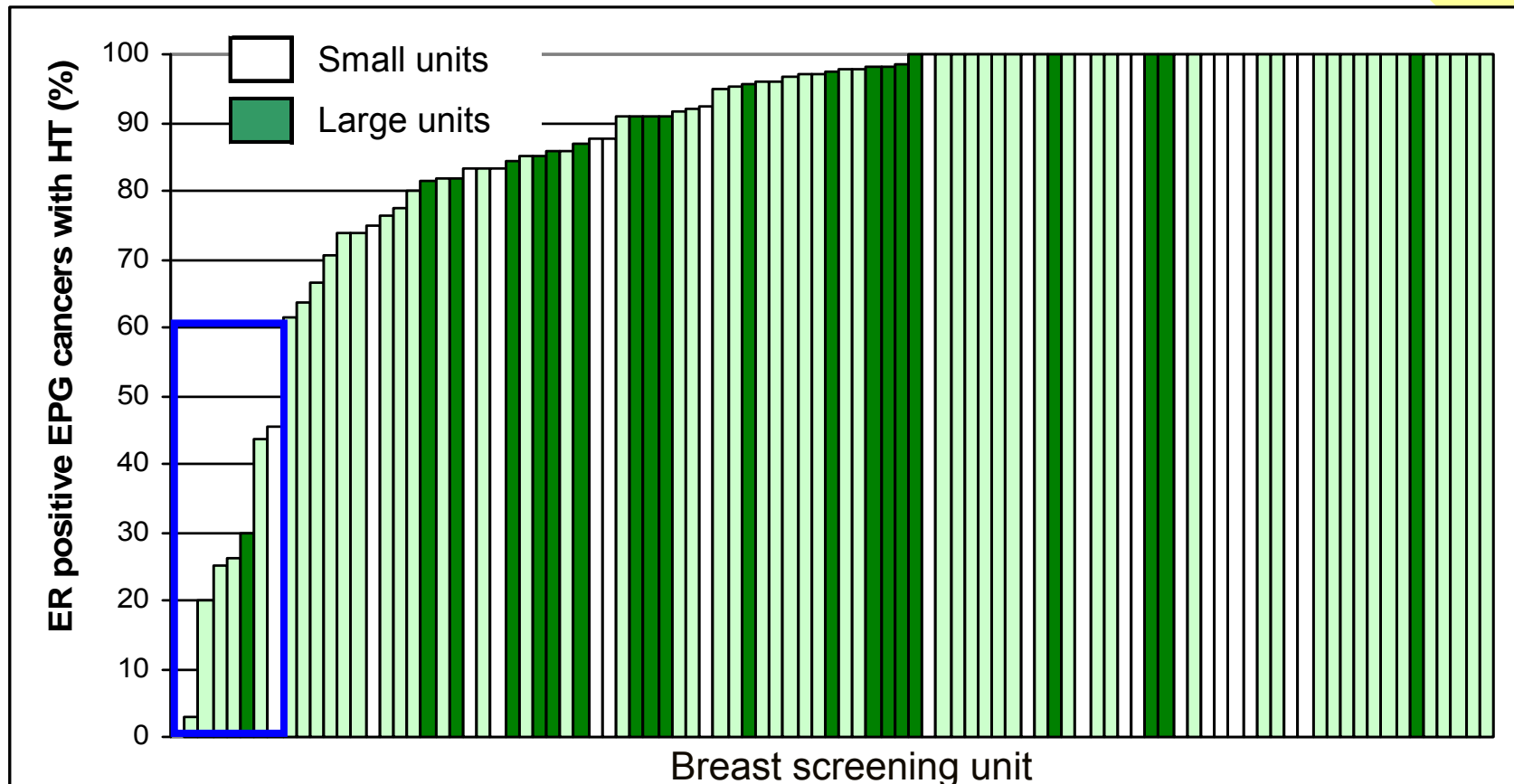


# “Hormonal therapy is beneficial to women with ER positive invasive cancers”

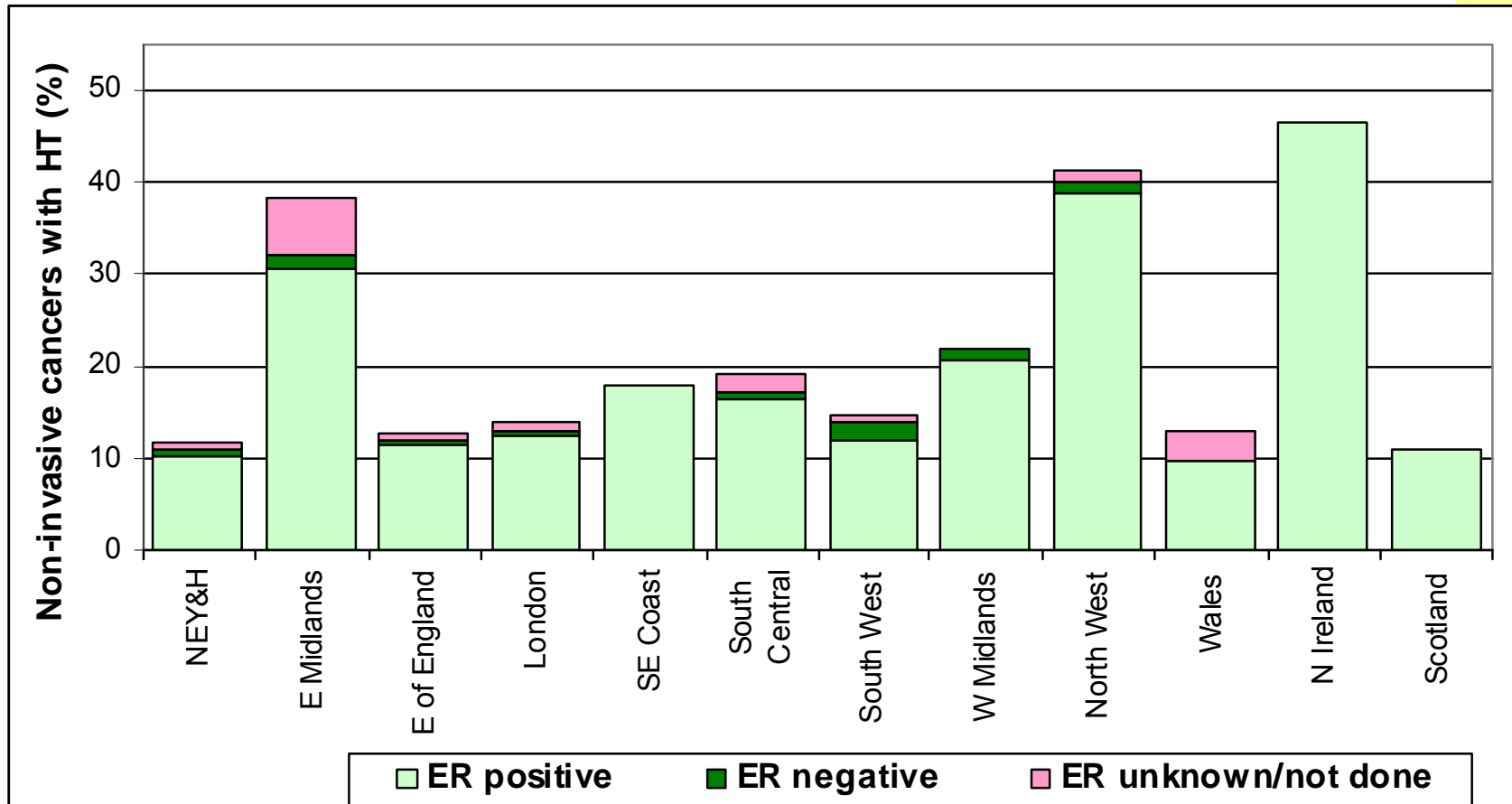


In UK, 6% of ER positive invasive cancers did not receive hormone therapy

# Hormone therapy for invasive ER +ve EPG cancers - variation between units 2006/07

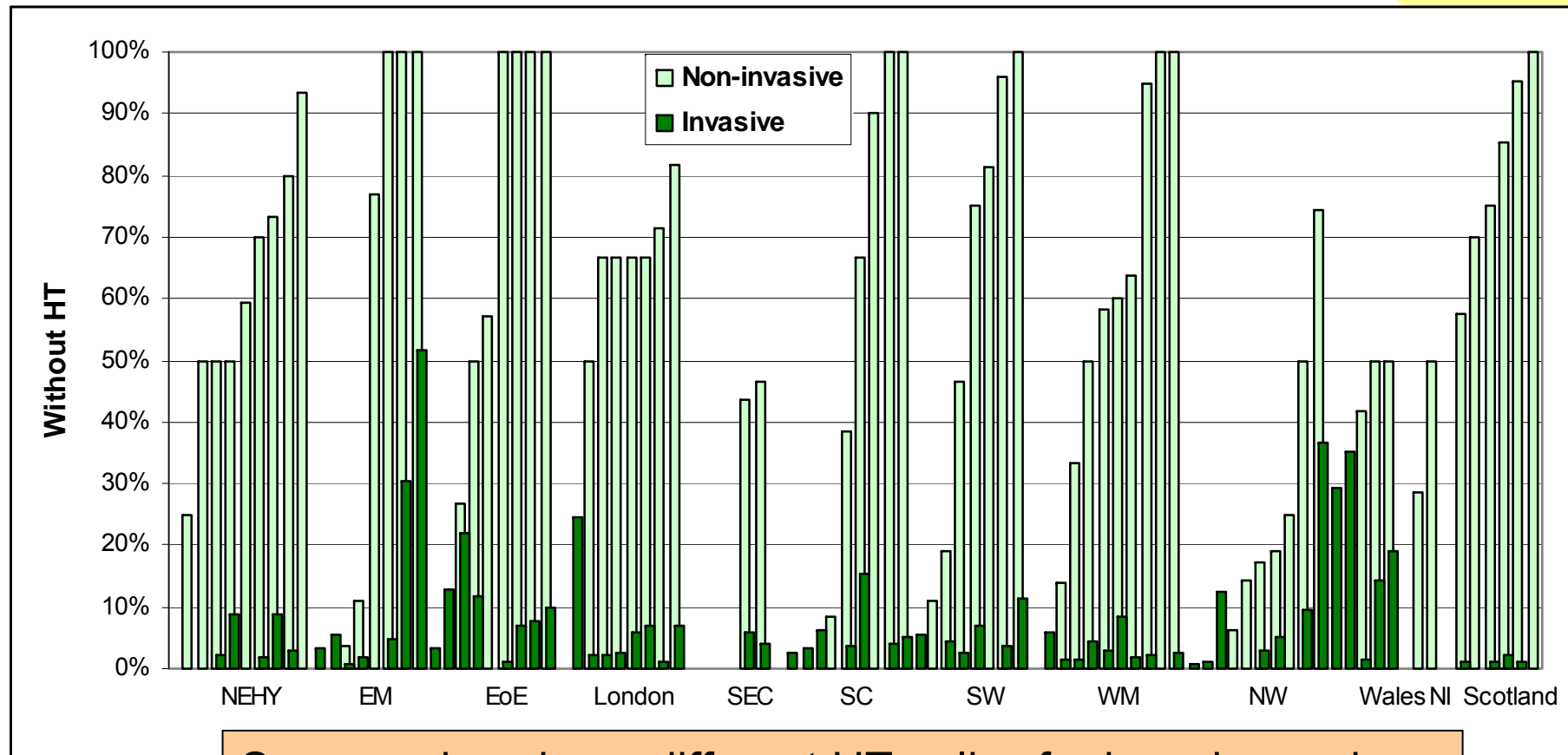


# “Hormonal therapy is beneficial to women with ER positive and ER negative/PgR positive non-invasive cancers”



In UK, 55% of ER positive non-invasive cancers did not receive hormone therapy

# Prescription of HT to invasive and non-invasive cancers

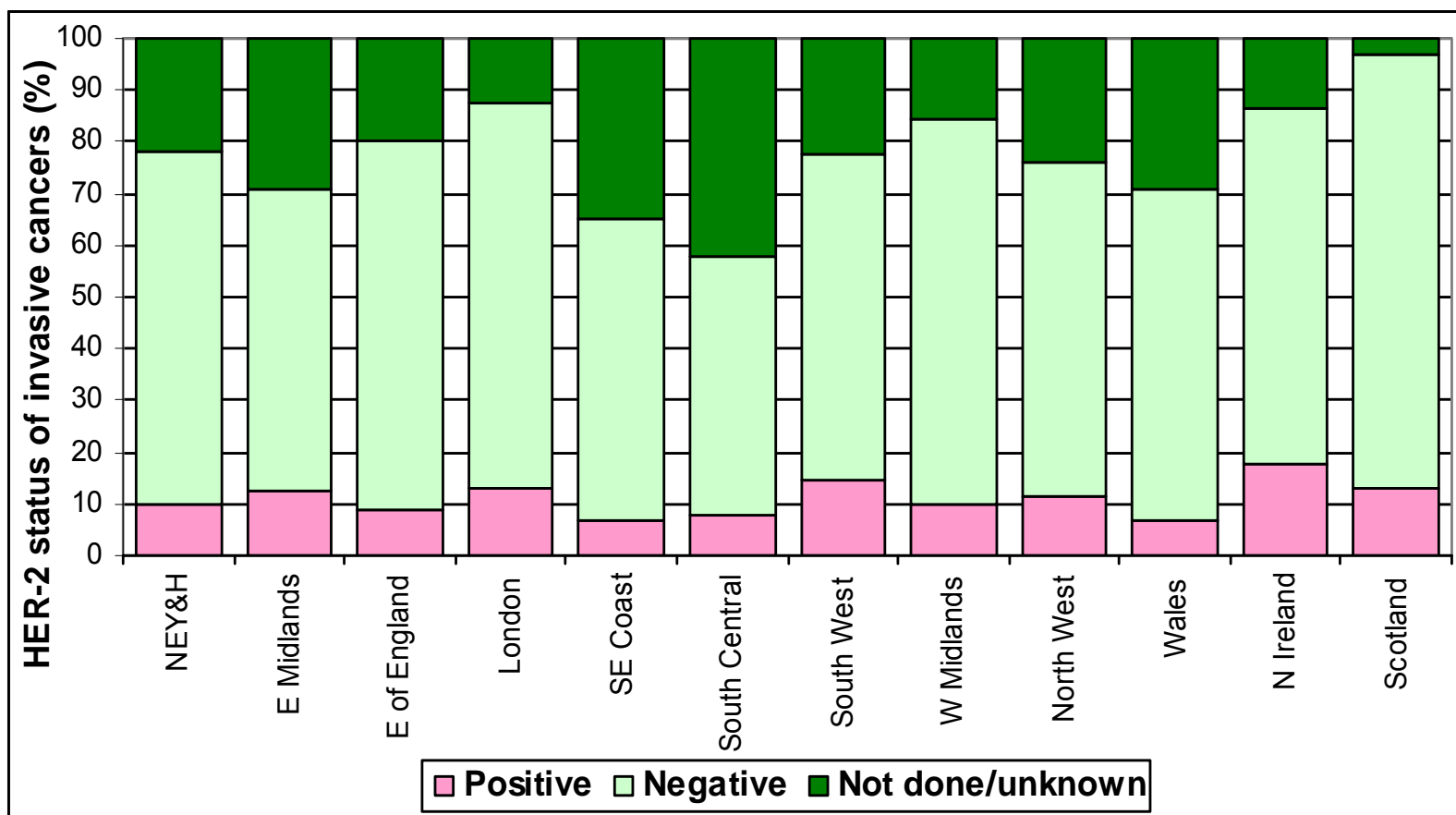


Some regions have different HT policy for invasive and non-invasive cancers. Some regions have a mixture in screening units...

# HER2 status of screen-detected invasive cancers in 2006/07

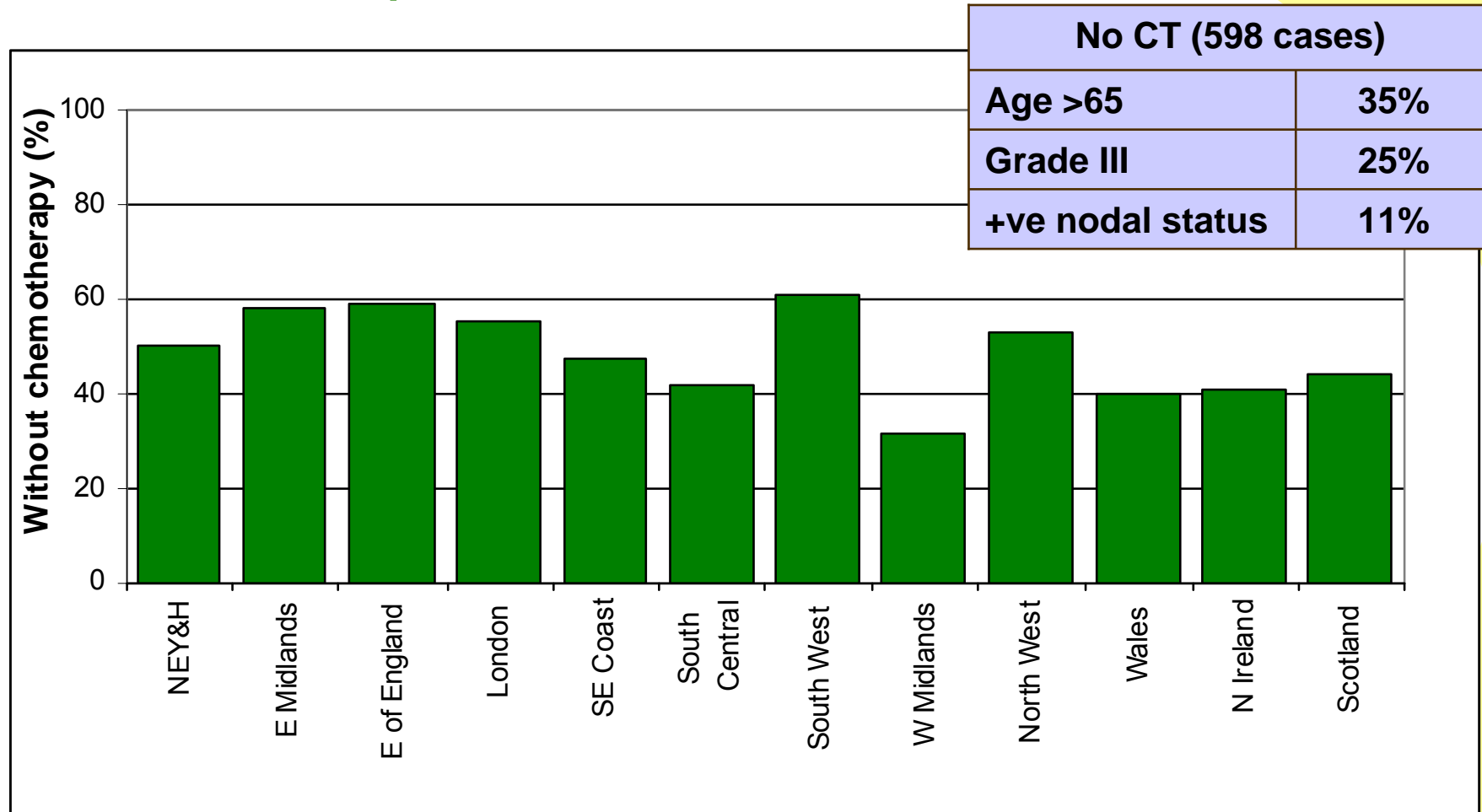


**New guidelines:** The HER2 status should be determined in every case of invasive breast cancer



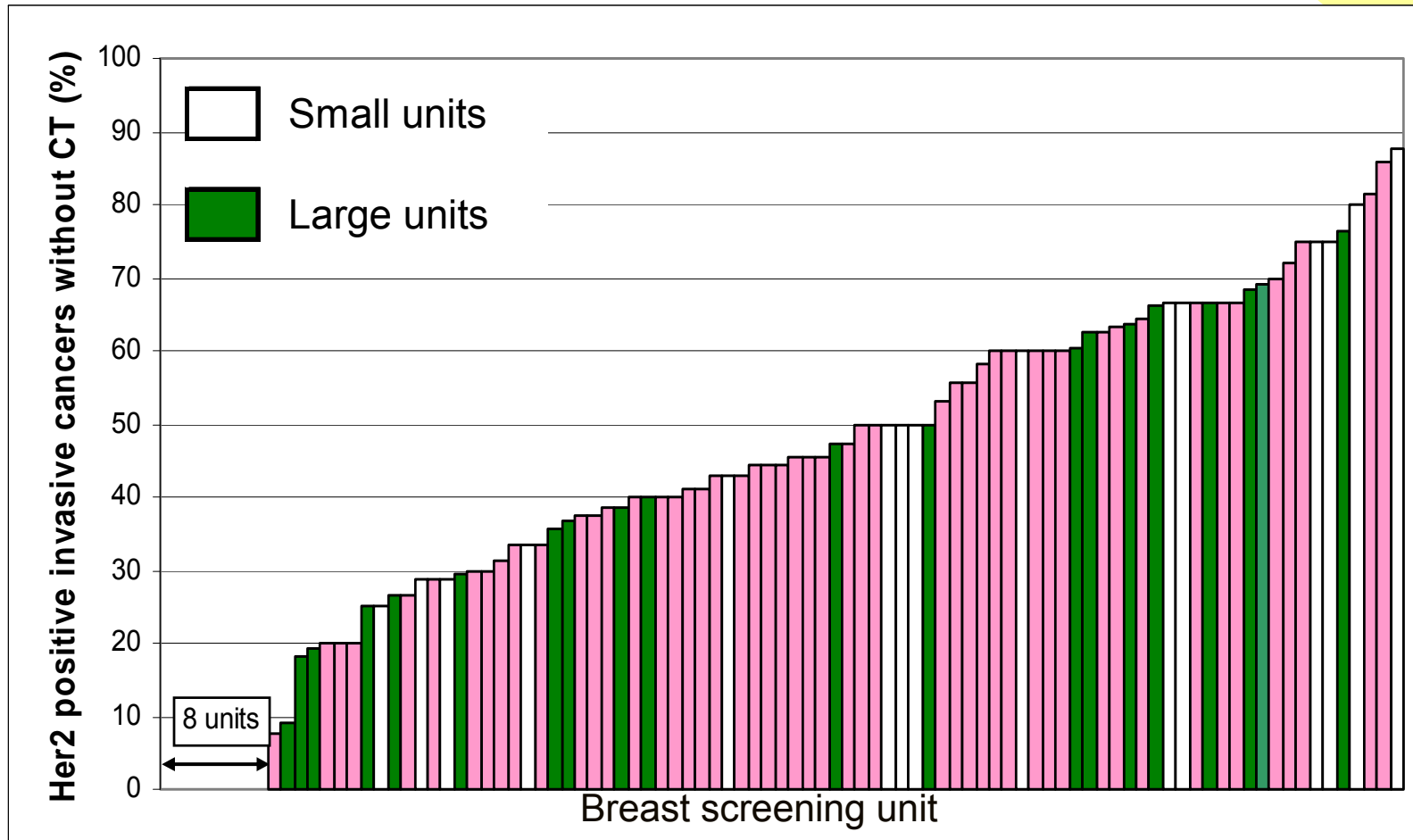
In UK, 22% of cases did not have HER2 status recorded

# “Chemotherapy should be considered for Her2 positive invasive cancers”



In UK, 51% of cases with known HER2 status did not have CT recorded

# HER2+ve cases with no CT recorded – variation between units 2006/07



In UK, 49% of HER2 positive cases did not have CT recorded

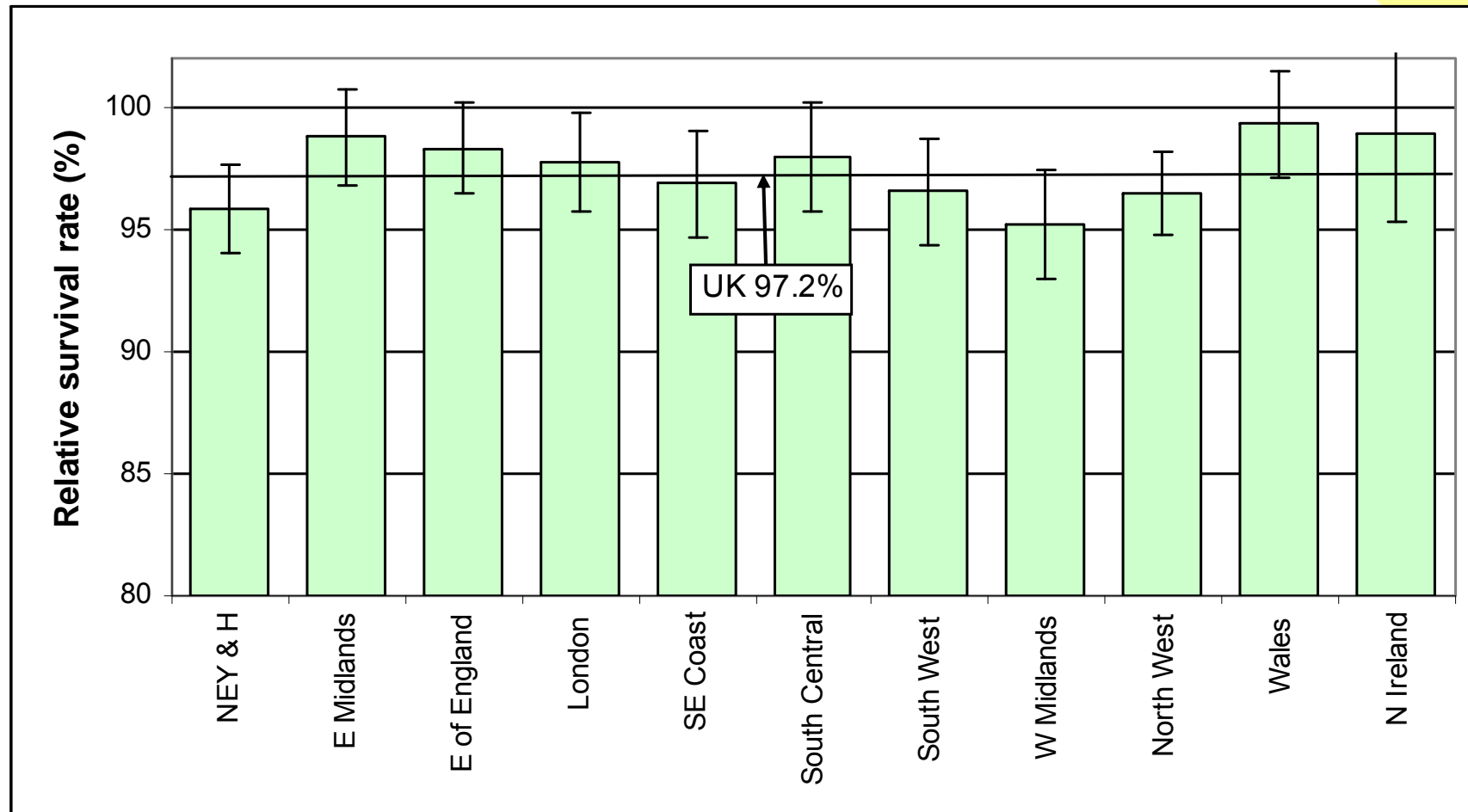


# Survival

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# 5 year relative survival

- screen-detected cases in 2001/02



Section still to be amended



# BCCOM Year 4 Data quality improvement



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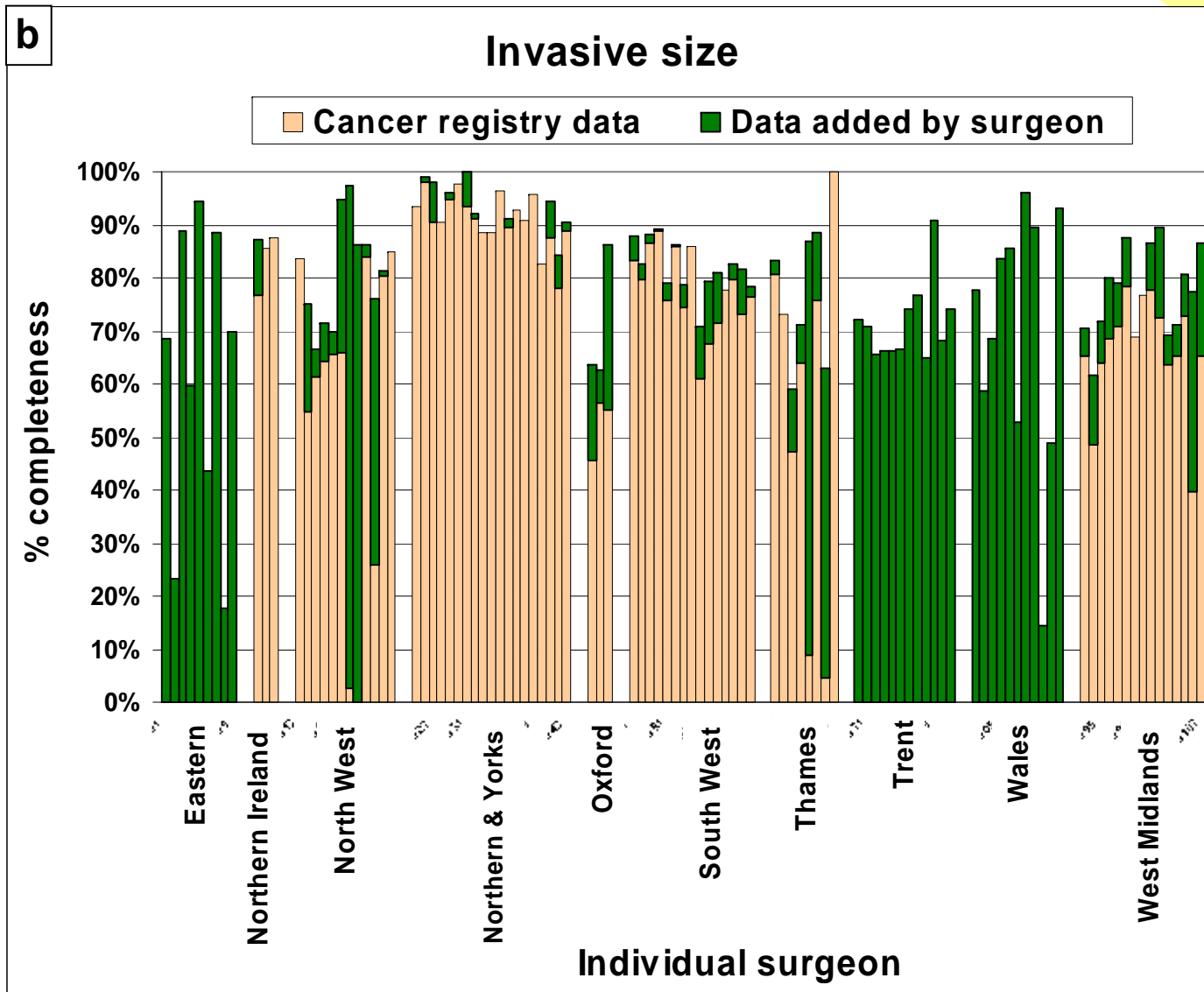
# The BCCOM project



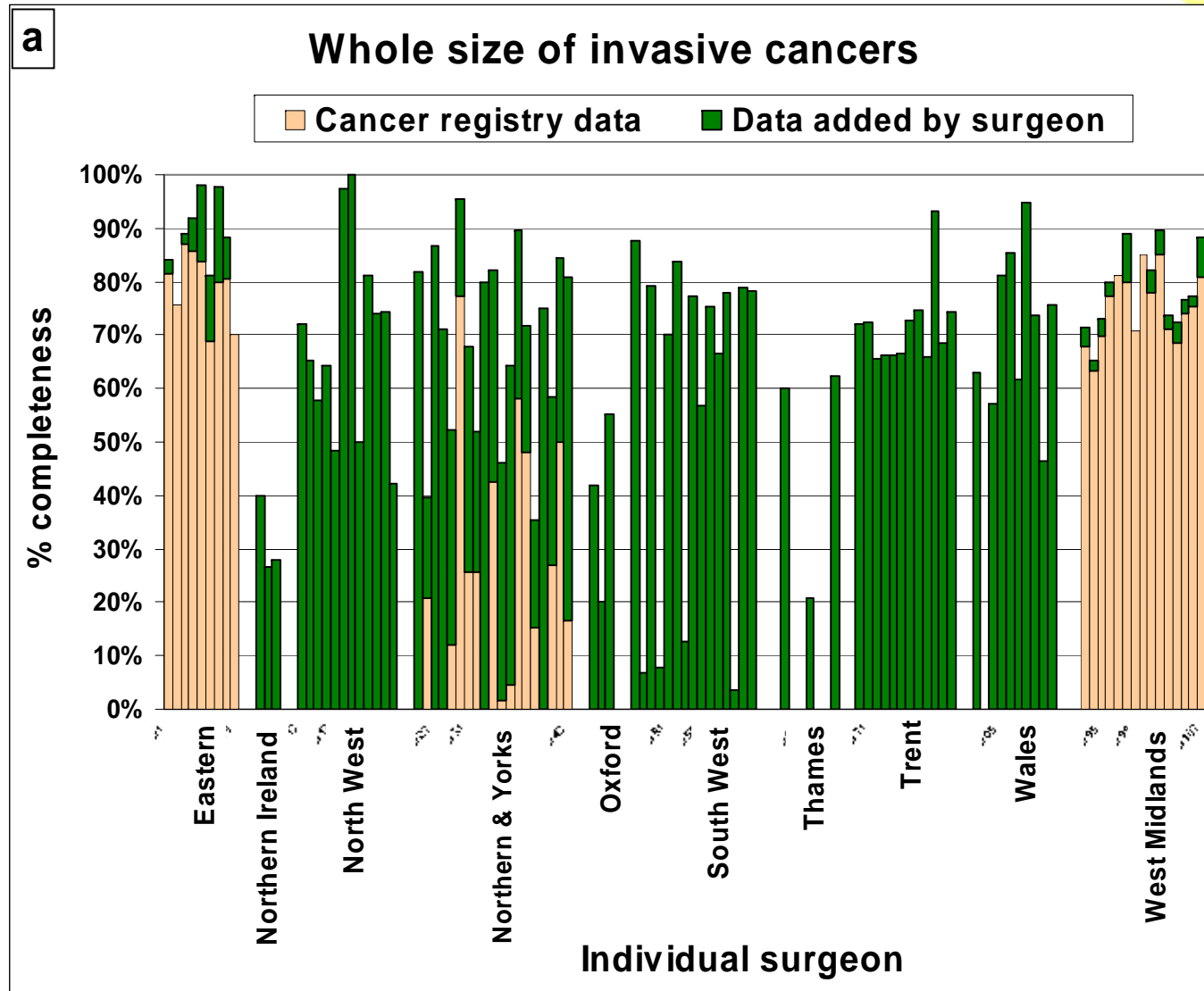
- Audit of symptomatic primary breast cancers diagnosed in the UK
- Original dataset for BCCOM are provided by UK cancer registries
- Surgeons are sent information regarding patients under their care. Surgeons can submit their data to BCCOM as:
  - Unchecked (= original cancer registry data)
  - Partly validated
  - Validated
- **BCCOM Year 4**: cancers diagnosed in 2005; results to be published in annual report.
- **BCCOM Year 5**: collection of data on cancers diagnosed in 2006 is ongoing



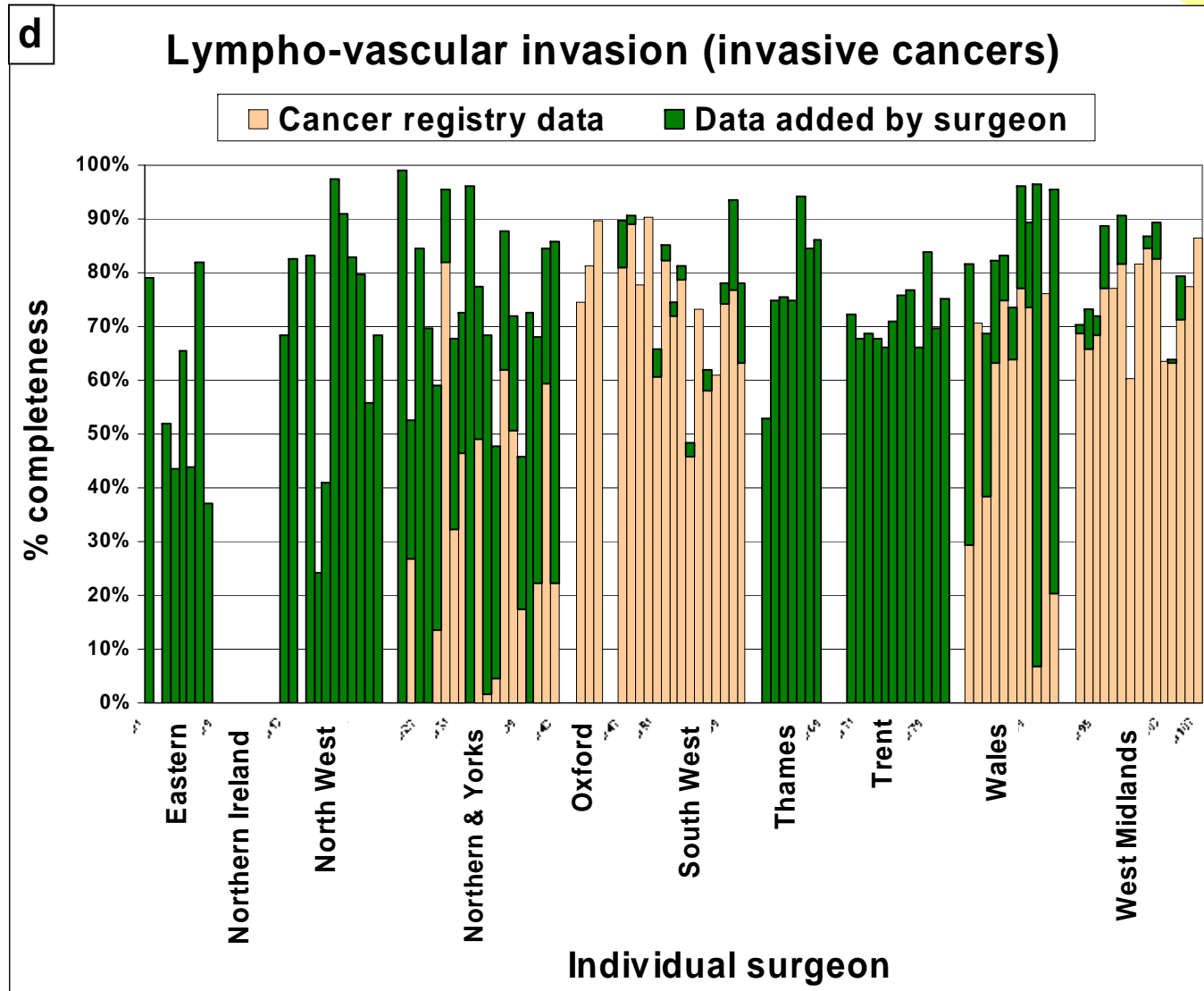
# Data completeness Year 4 (2)



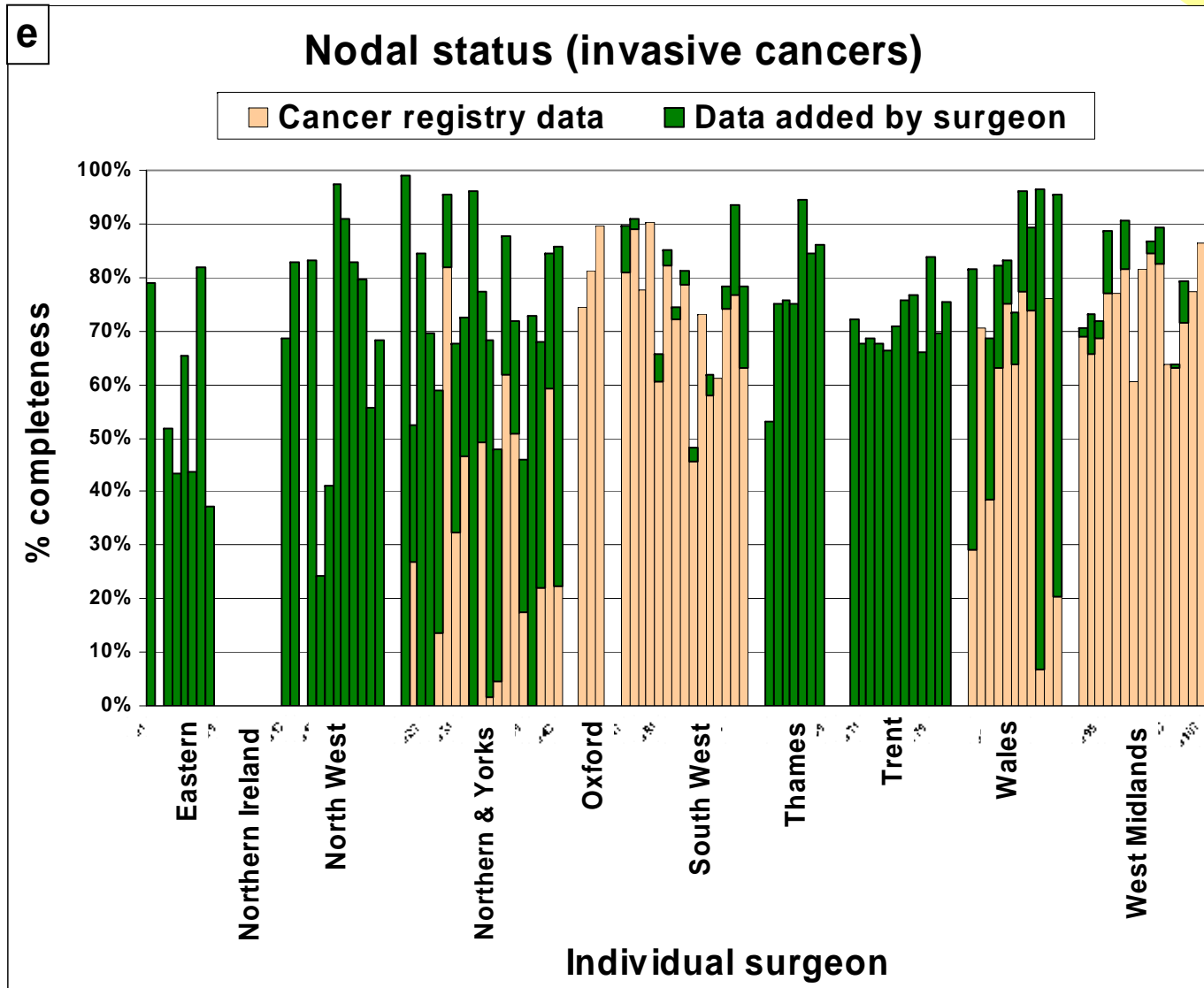
# Data completeness Year 4 (1)



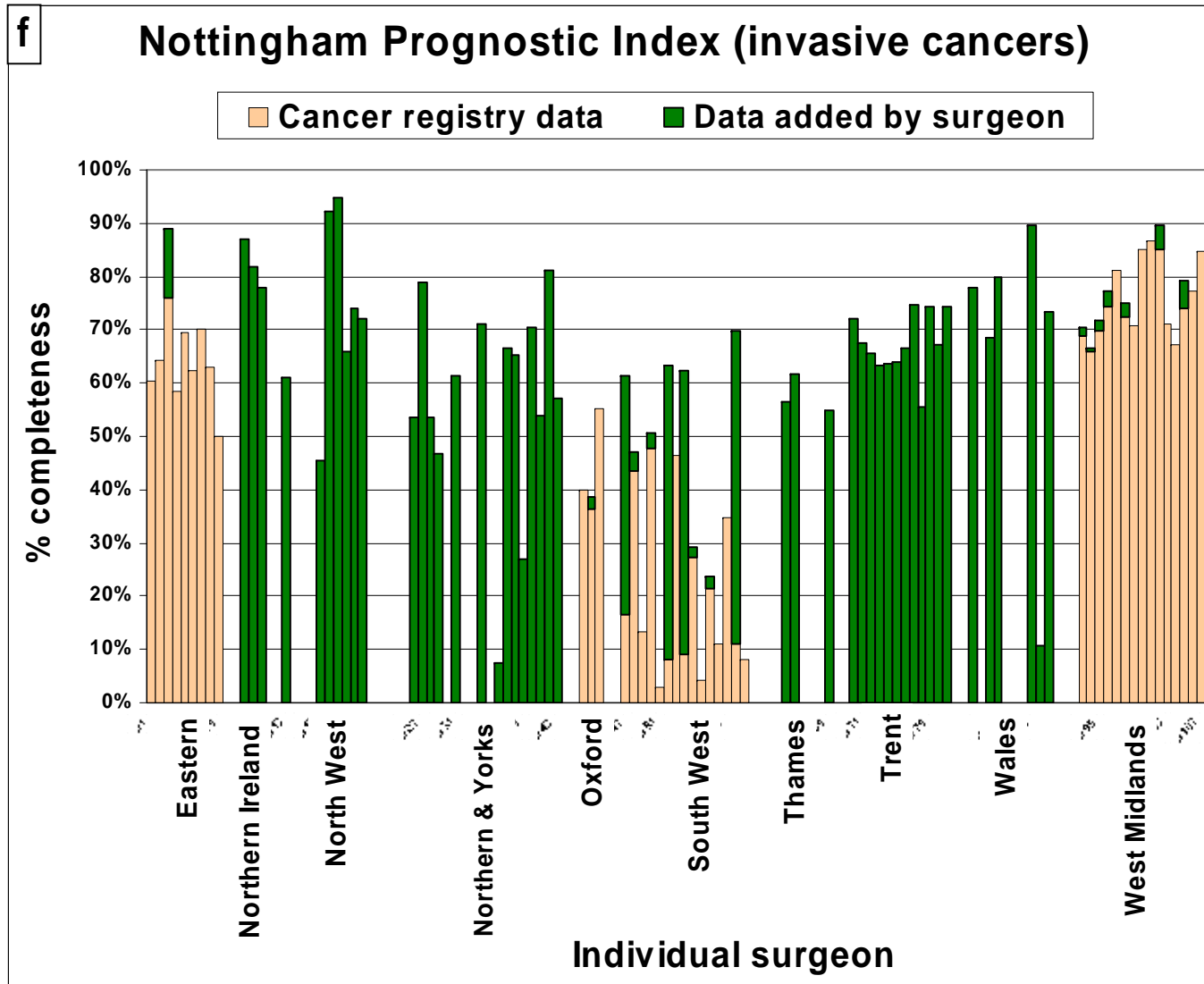
# Data completeness Year 4 (4)



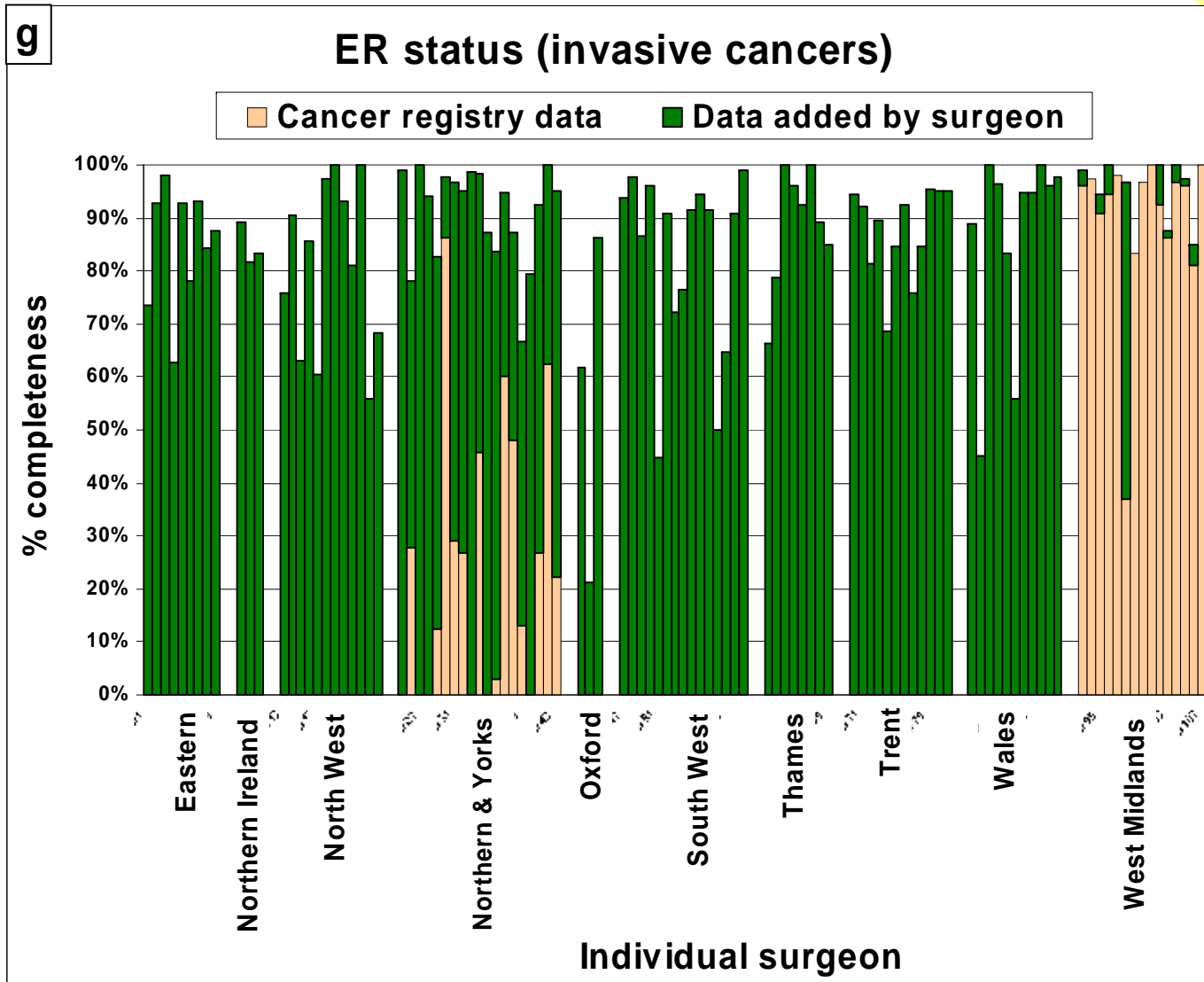
# Data completeness Year 4 (5)



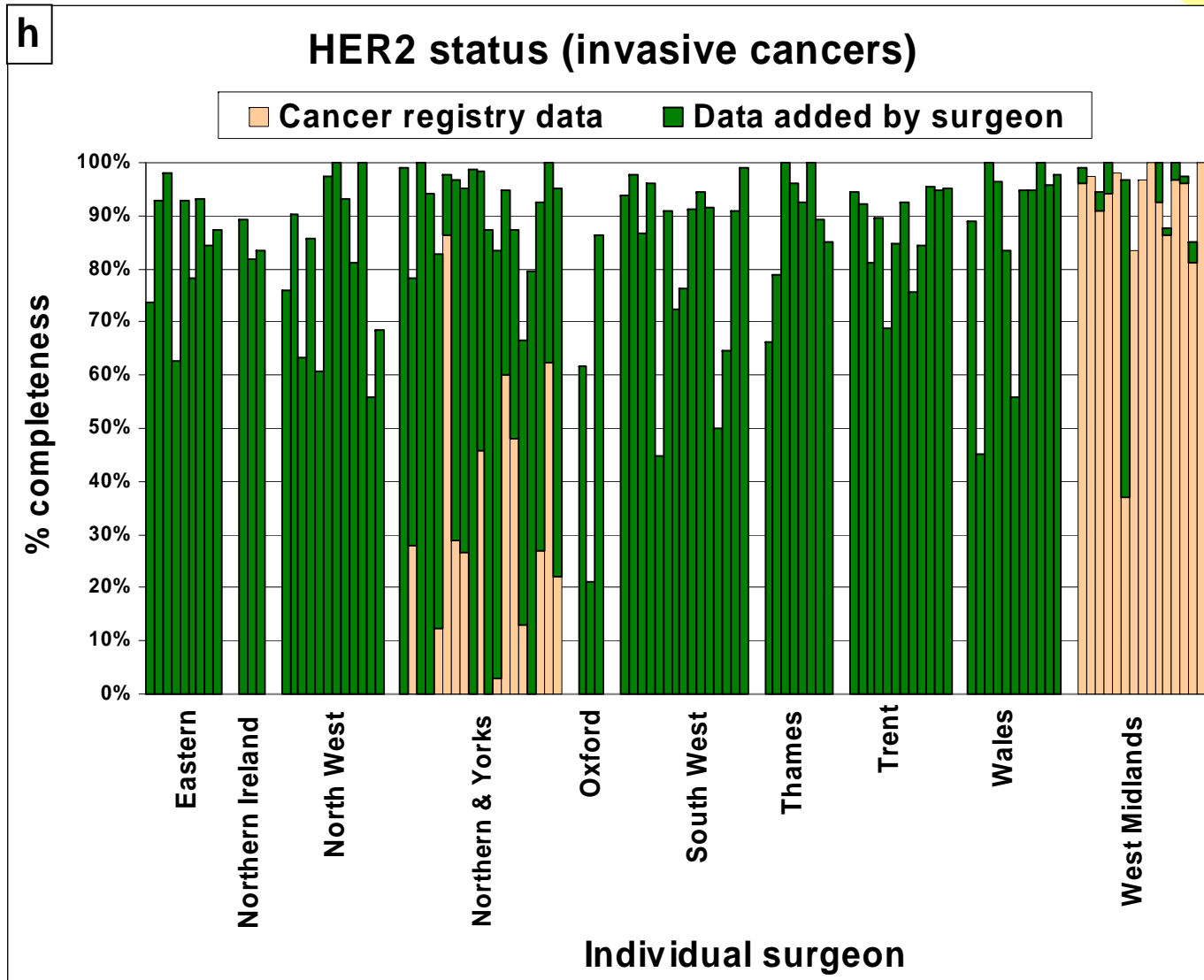
# Data completeness Year 4 (6)



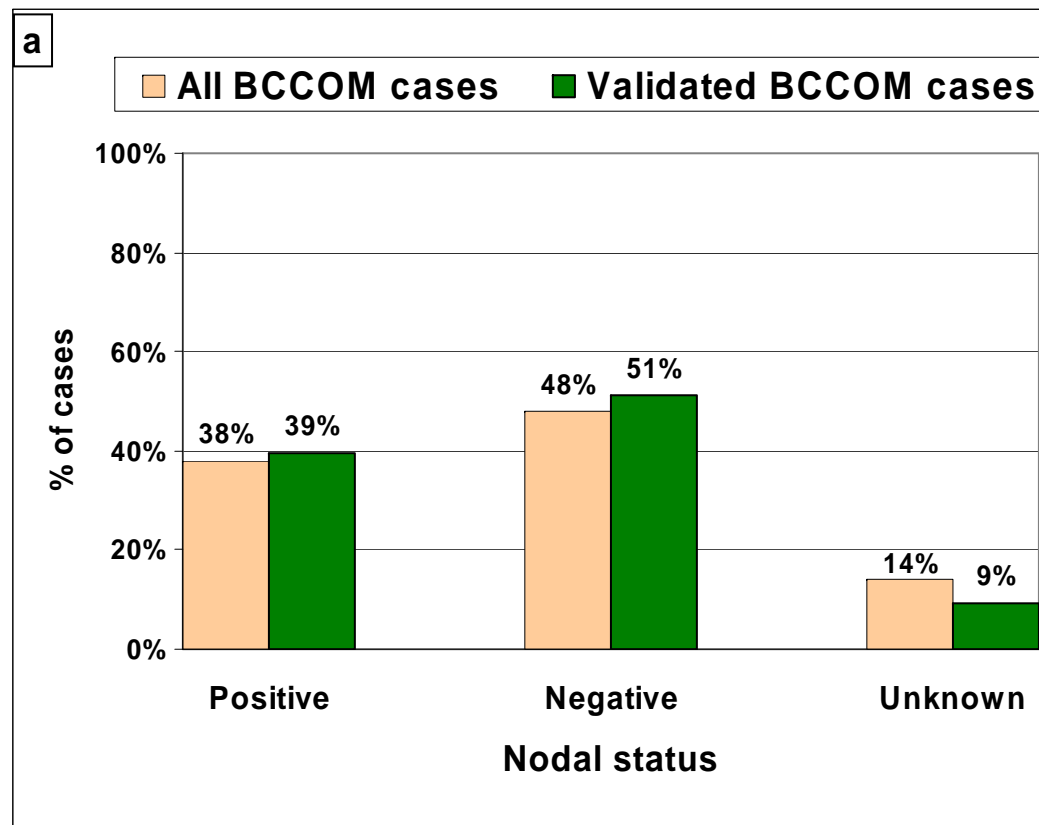
# Data completeness Year 4 (7)



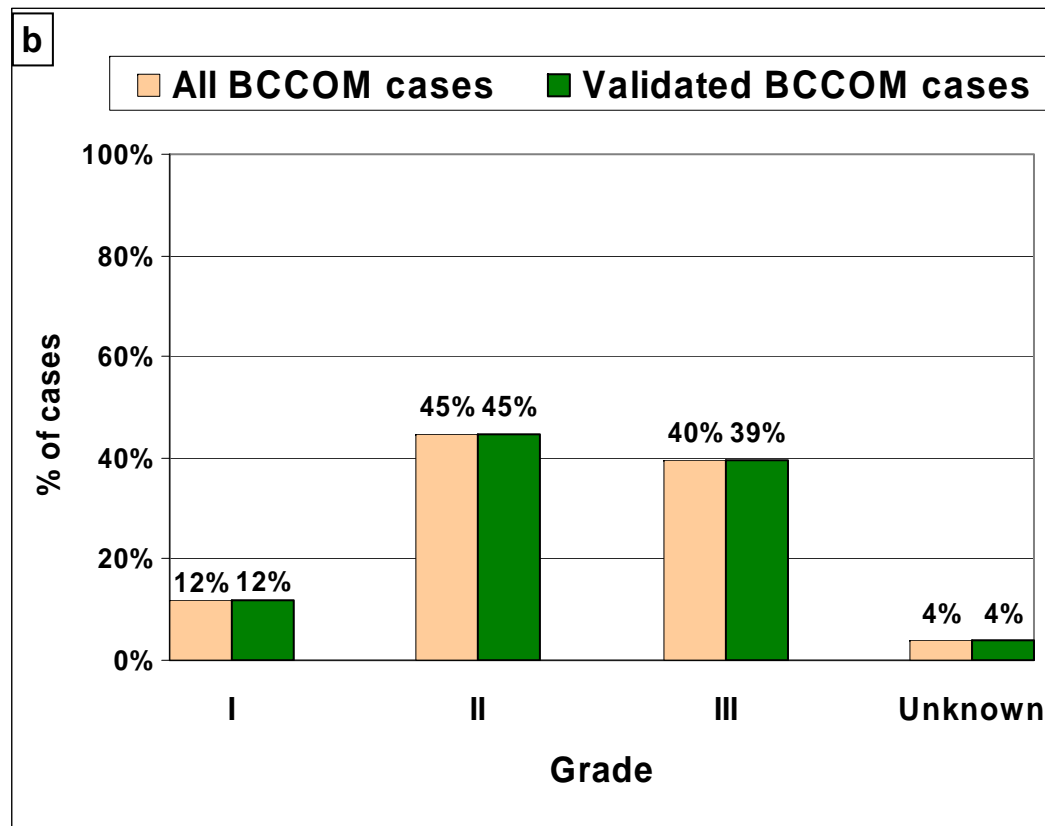
# Data completeness Year 4 (8)



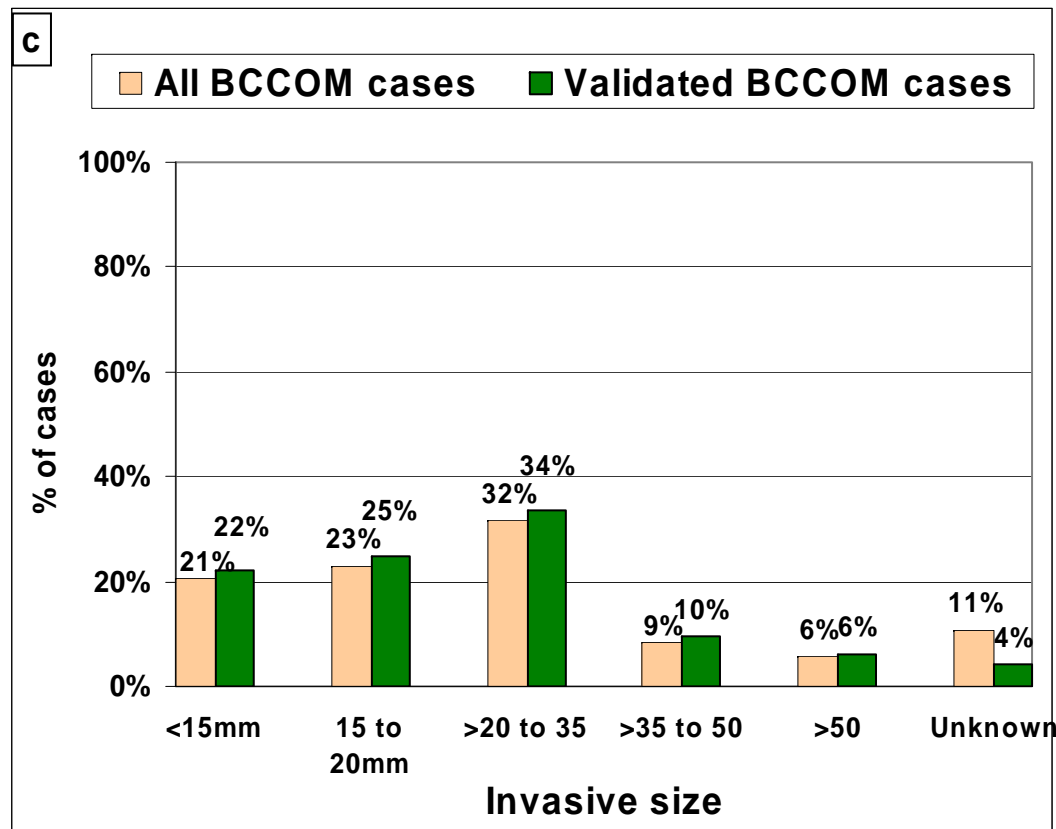
# Characteristics of invasive surgically treated cancers: nodal status



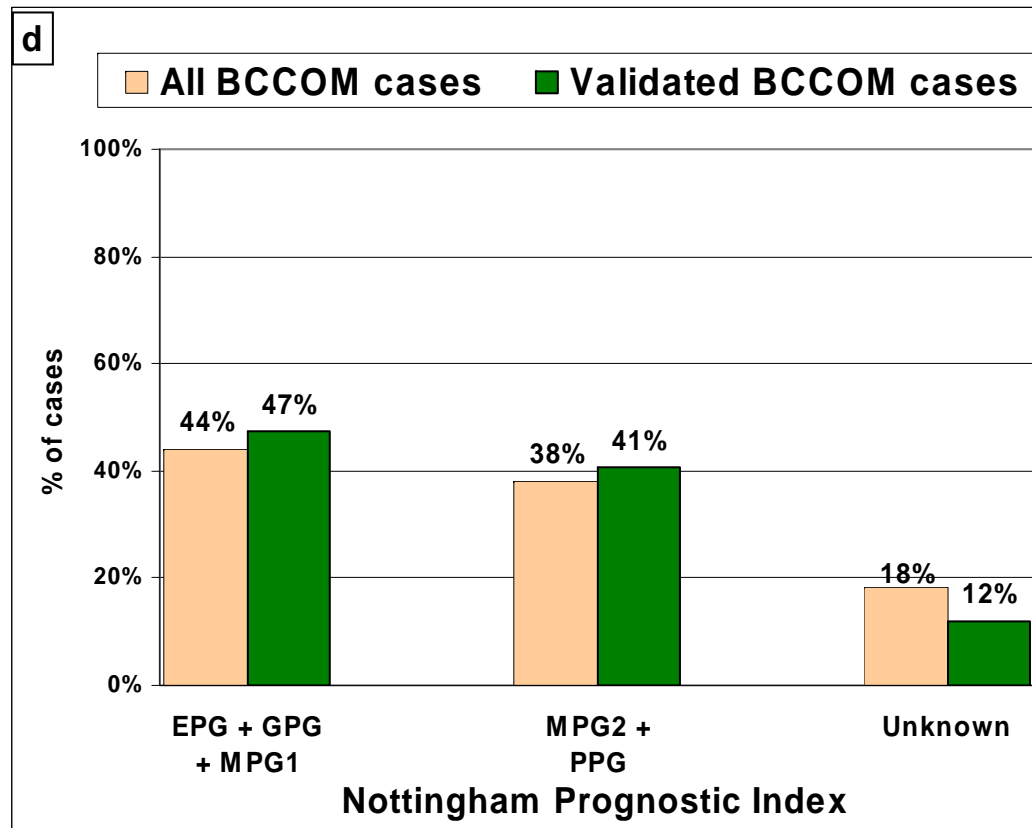
# Characteristics of invasive surgically treated cancers: grade



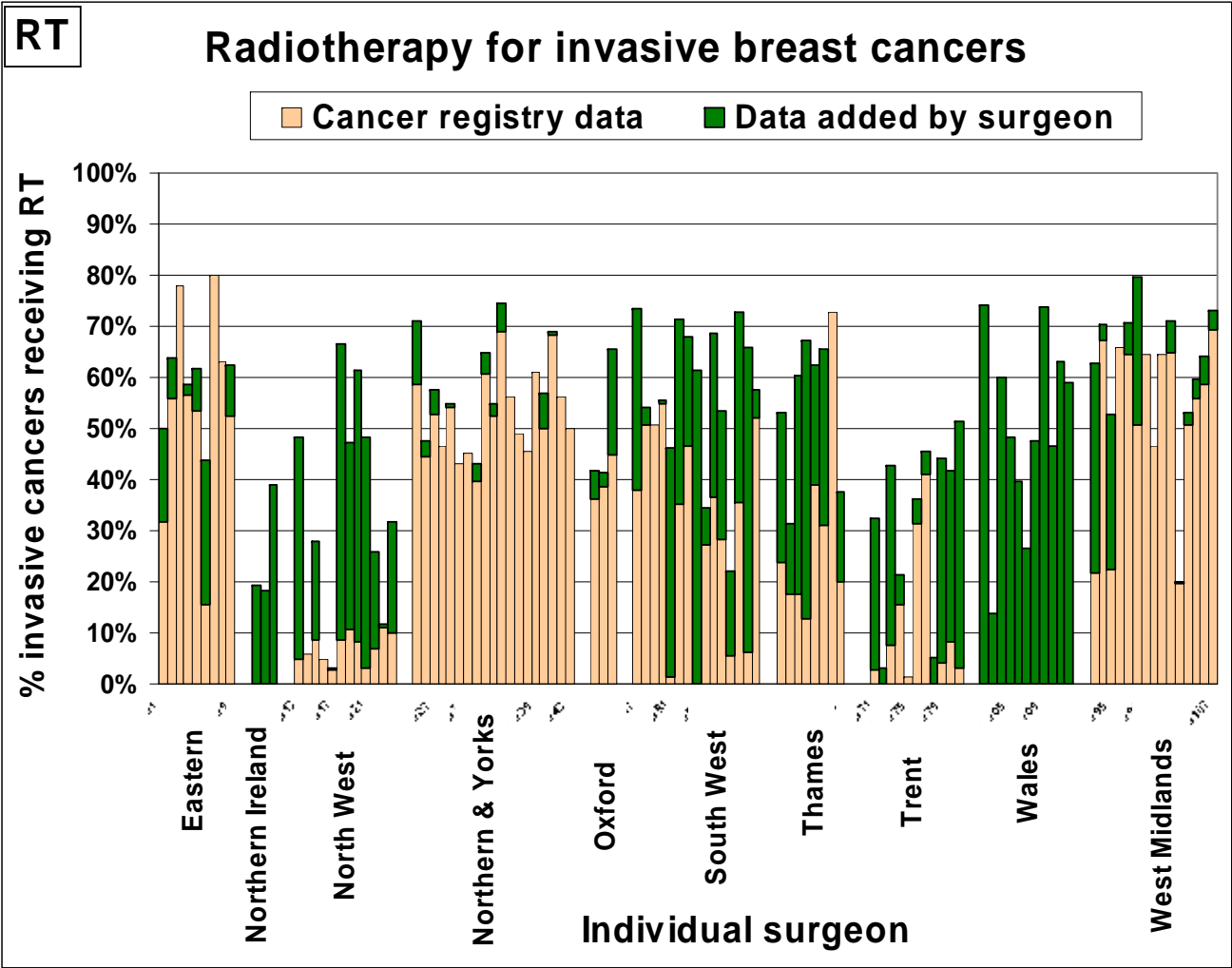
# Characteristics of invasive surgically treated cancers: invasive size



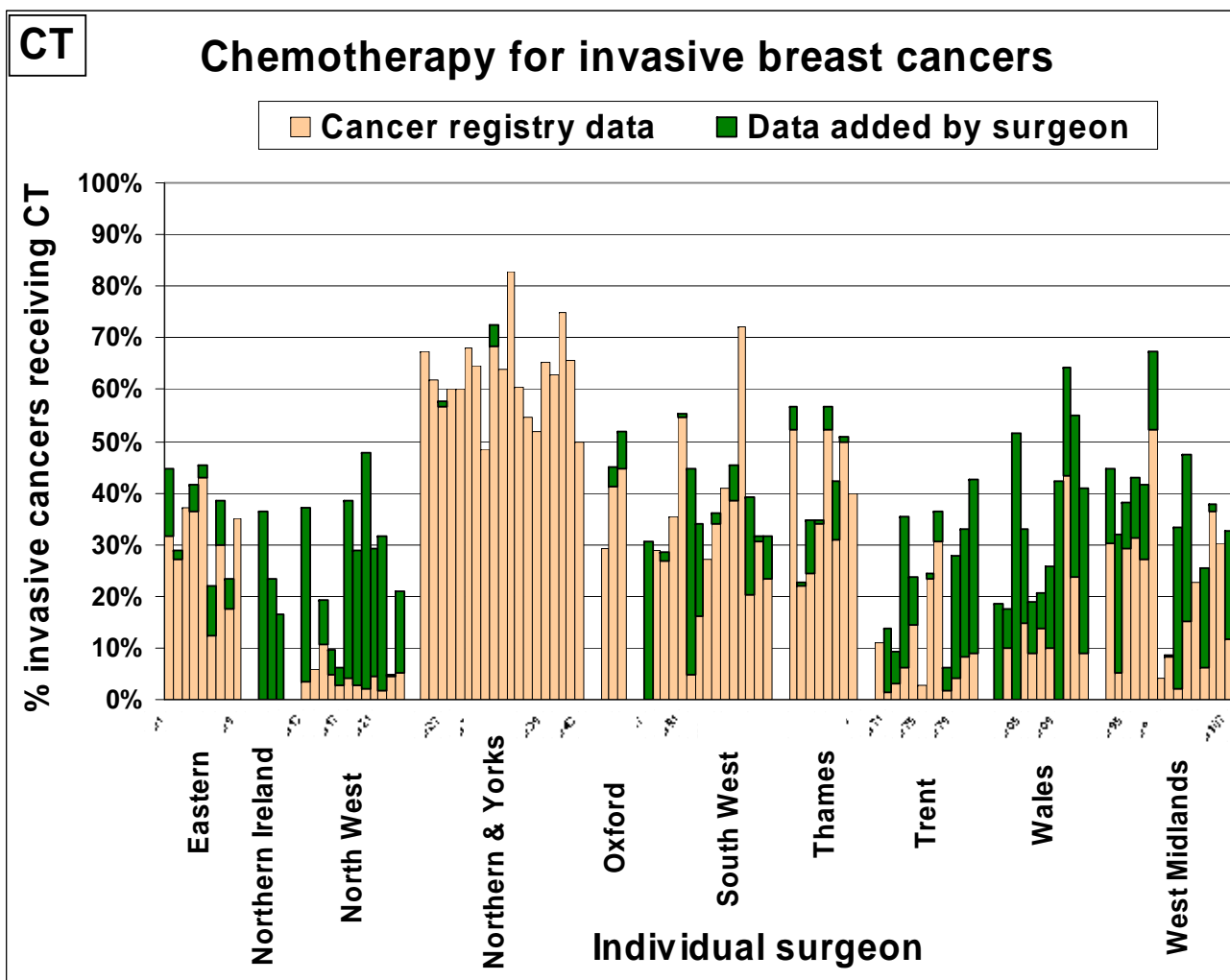
# Characteristics of invasive surgically treated cancers: NPI



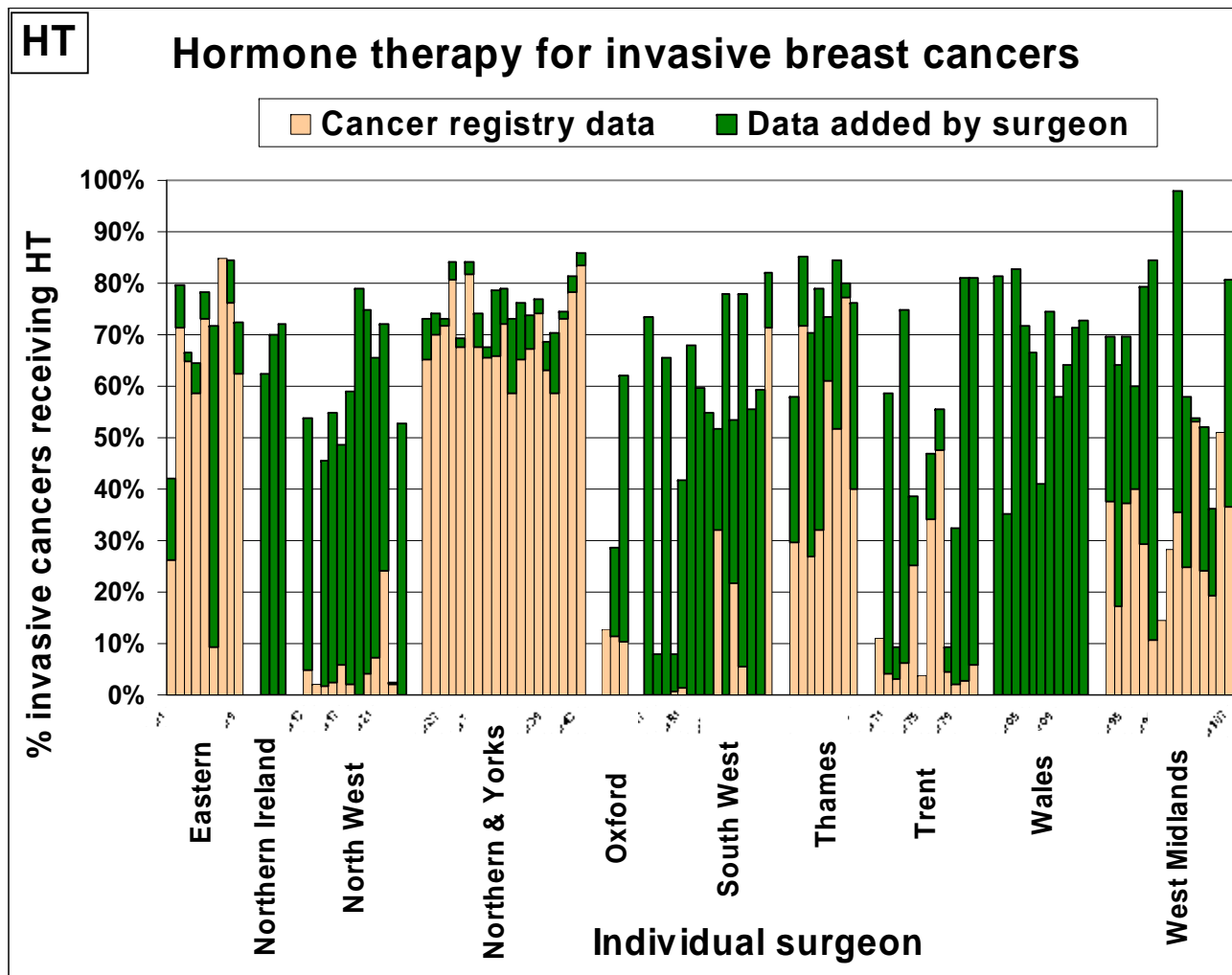
# Treatment data Year 4: RT



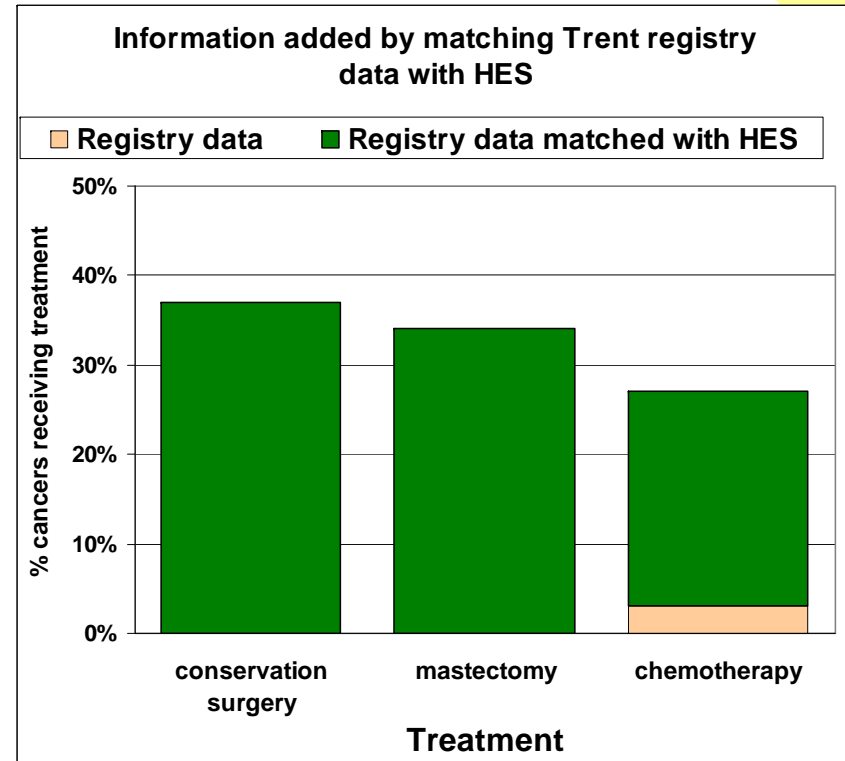
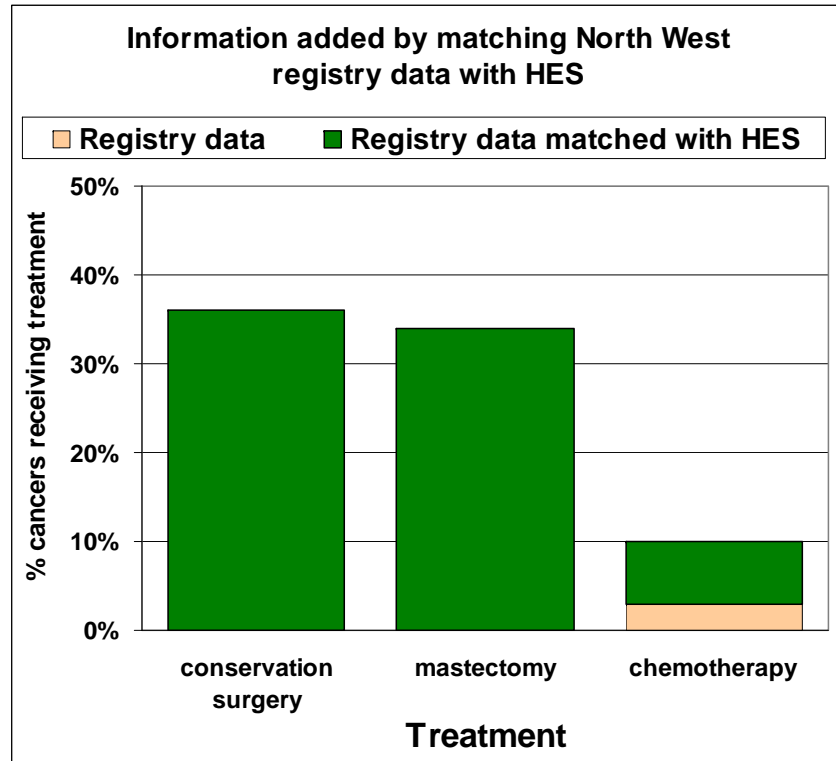
# Treatment data Year 4: CT



# Treatment data Year 4: HT



# Matching of data from two registries with Hospital Episodes Statistics data





# Thankyou

Thankyou

WMCIU  
Olive Kearins  
**ABS at BASO**  
Shan Cheung  
Nicola Greenway  
**BCCOM**  
Catherine Lagord  
Louise Williams

Breast Screening QARCs  
Screening Units  
BCCOM Steering Group  
Cancer Registries  
Breast Surgeons