



Coping with the increasing trend of mastectomies ?

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ICBDC, Paris, 28 jan 2011

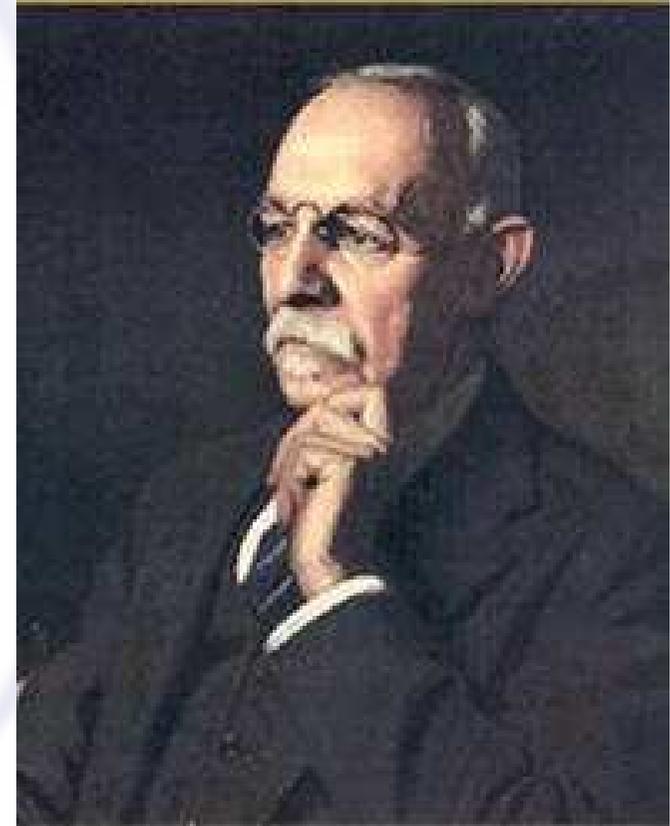
Introduction

- Mastectomy dramatic event after diagnosis of breast cancer
- Eusoma guidelines : BCT must be achieved in inv.ca < 30 mm : > 80%
- Decision of mastectomy :
 - Age
 - Preference
 - Breast imaging
 - Tumour characteristics



Evolution of mastectomy rate

- Halsted introduced the radical mastectomy
- Increasing trend of BCS in the eighties (U. Veronesi and B. Fisher)



William S. Halsted, MD

Are the mastectomy rates increasing ?

Single-institution studies: a rise in “M” rate:

- From 35% in 2004 to 60% in 2007
Lee Moffit Cancer Centre, Florida (5865 patients)
- From 28% in 1998 to 30% in “2005 period”
Magee-Women’s Hospital in Pittsburg (3606 patients)
- From 31% in 2003 to 43% in 2006
Mayo Clinic (5405 patients)

Is there a role of the MRI ?

- Patients with MRI are more likely to undergo mastectomy:

54% (with MRI) versus 35 % (no MRI) in 2004

MRI is by far superior to mammography for the local staging, but without increase (till now) in the disease free survival

- BUT: similar increase in “M” rate in patients without MRI : 29% in 2003 versus 41% in 2006

Are the mastectomy rates decreasing?

Population-based study to evaluate national trends in the US (data 2010)

- SEER cancer register represents 26% of US, about 233.754 breast cancers
- DCIS, and breast cancer stage I to III
- SEER data showed a decline from 40,8% to 37% from 2000 to 2006

Explanation of this differences ?

- Problems with single-institution studies
 - Patient selection: more aggressive surgery? different women than the average American woman?
 - Variations in referral pattern: strong family history? more complicated cases? younger patients? use of more imaging as MRI?
 - Ahead of nationwide trends ?
- Nationwide study
 - Significant geographic variation
- BUT: Contralateral prophylactic mastectomy increases in all studies

Situation in Europe? Rest of the world?

Team Trial Data, van Nes, BJS, 2010

Dutch Cancer Registry, Siesling S, Breast, 2007

Finnish Cancer Registry, Peltoniemi P, Ann Surg Oncol, 2011

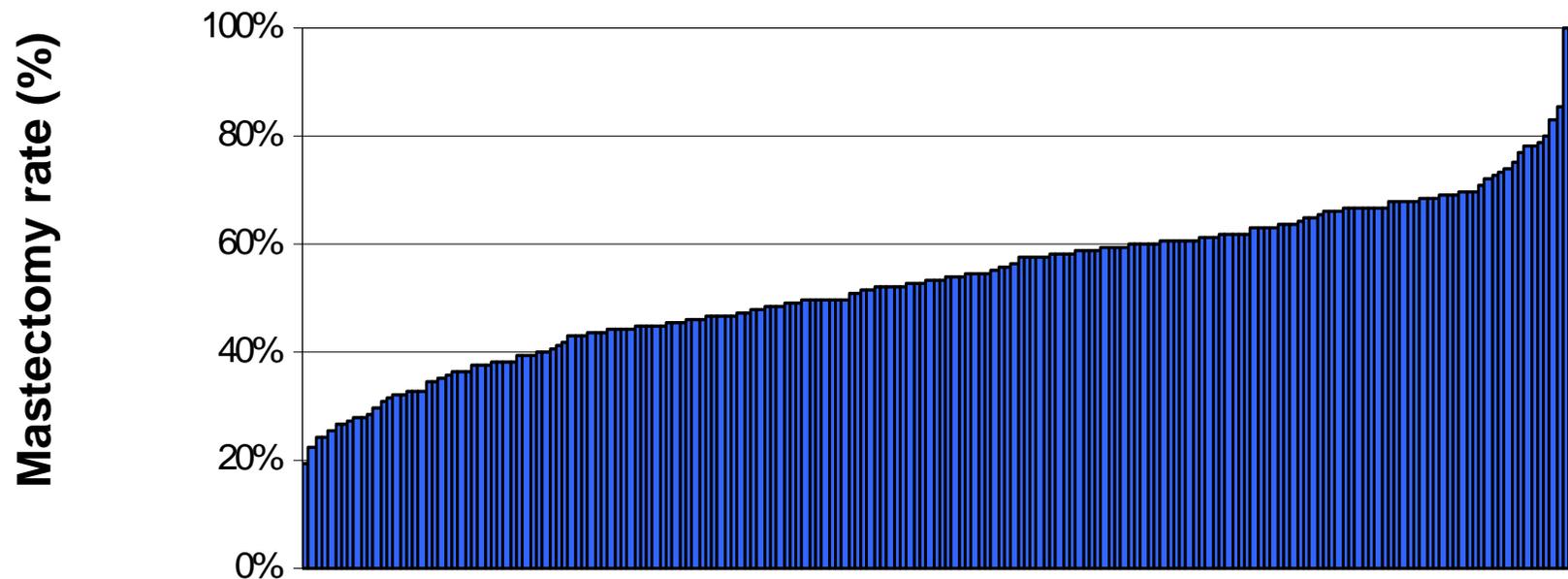
- Europe (% Mastectomy)
 - UK : 44,4%
 - Belgium : 50,9%
 - France : 19,4%
 - Finland : 53 %, 55 % N0 (F.C.R.)
 - Germany : 29,7%
 - Greece : 55,6%
 - Netherlands : 55,5% (Team Trial Data)
 - Netherlands : pT1 : 38%, pT2 : 66% (D.C.R.)
- Rest of the World (% Mastectomy)?
 - Japan : 35,8%
 - USA : 51,2%

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UK: Trends in mastectomy

Prof.M.Reed,Sheffield

Variations in Mastectomy rates between UK surgeons in 2004



Surgeon

number of patients treated
surgically by surgeon 12 - 184

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UK National Mastectomy and Breast Reconstruction Audit

- Women with breast cancer
- Who underwent mastectomy or breast reconstruction surgery
- in the NHS and independent sector in England
- between 1 January 2008 and 31 March 2009
- Data collected by:
 - clinicians on clinical practice and in patient outcomes
 - patients on treatment options, patient-reported outcomes and experience of care

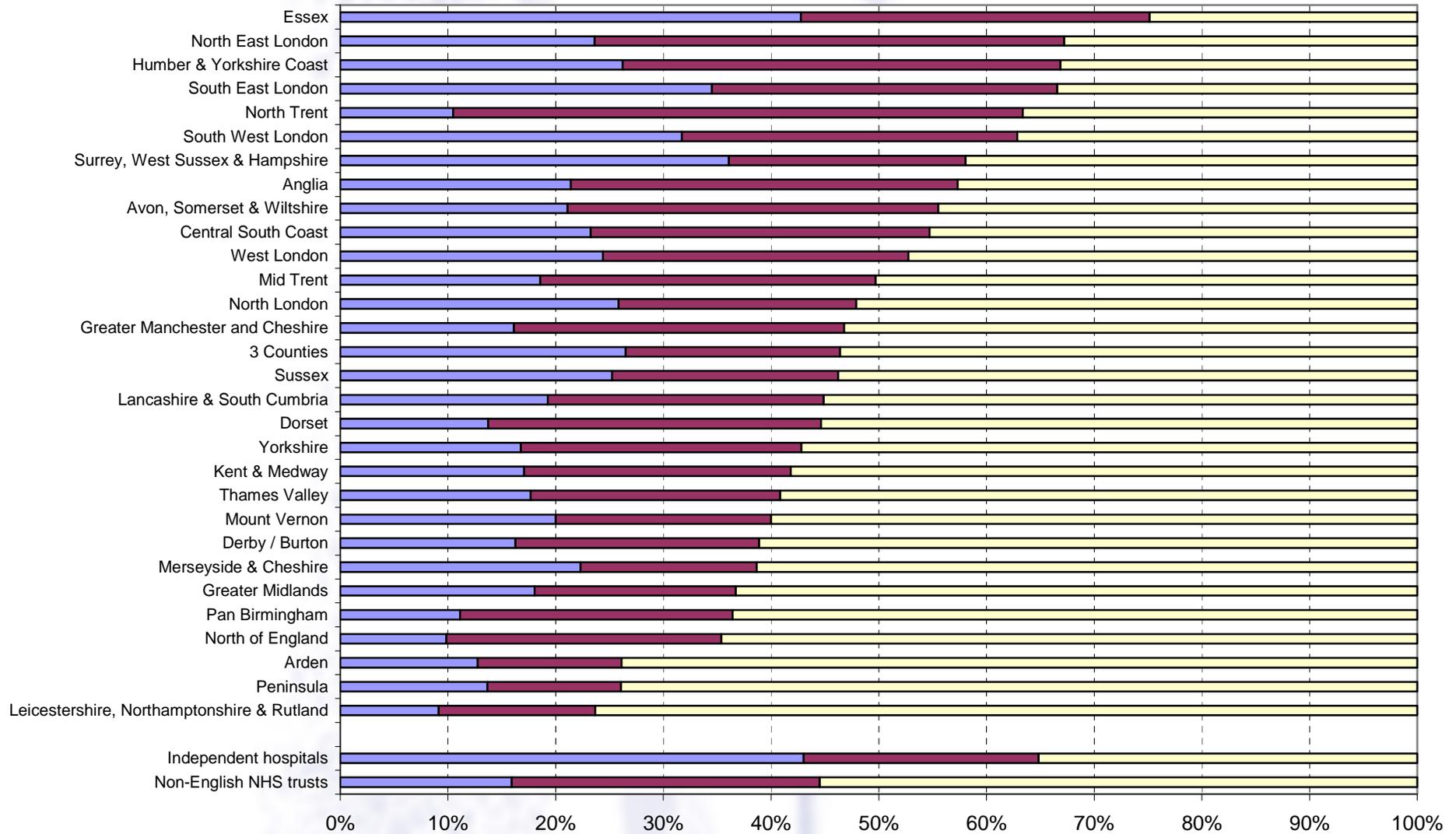
10,521 women asked to participate

8,636 (82%) gave their consent

8,159 women sent questionnaires

6,882 (84%) returned a completed questionnaire

Results – network variation

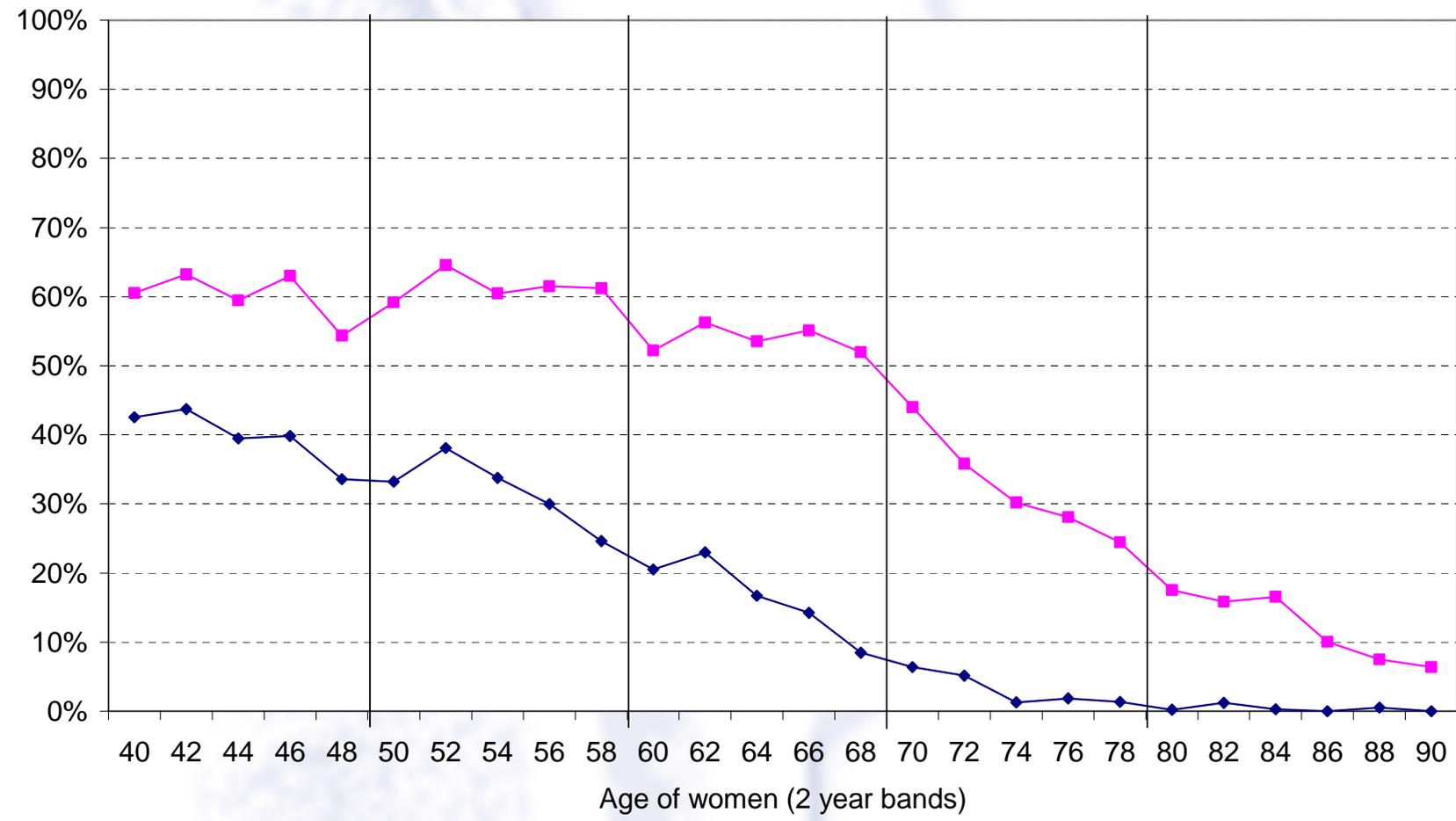


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■ Percentage who accepted IR offer
 ■ Percentage who rejected IR offer
 ■ Percentage who were not offered IR

UK : Immediate reconstruction and age

Important variation in offer and reconstruction performance



◆ Rate of IR ■ Rate of IR offer

Belgium: Quality indicators in breast cancer

KCE report, S. Stordeur, J. Vlayen, L. Van Eycken, Jan 2011

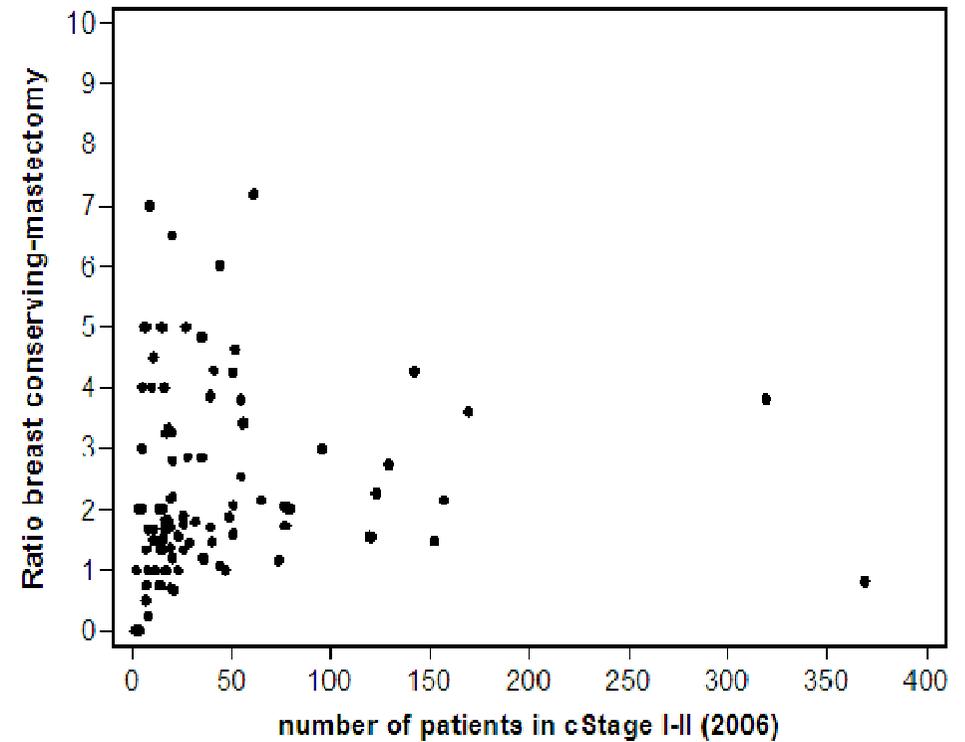
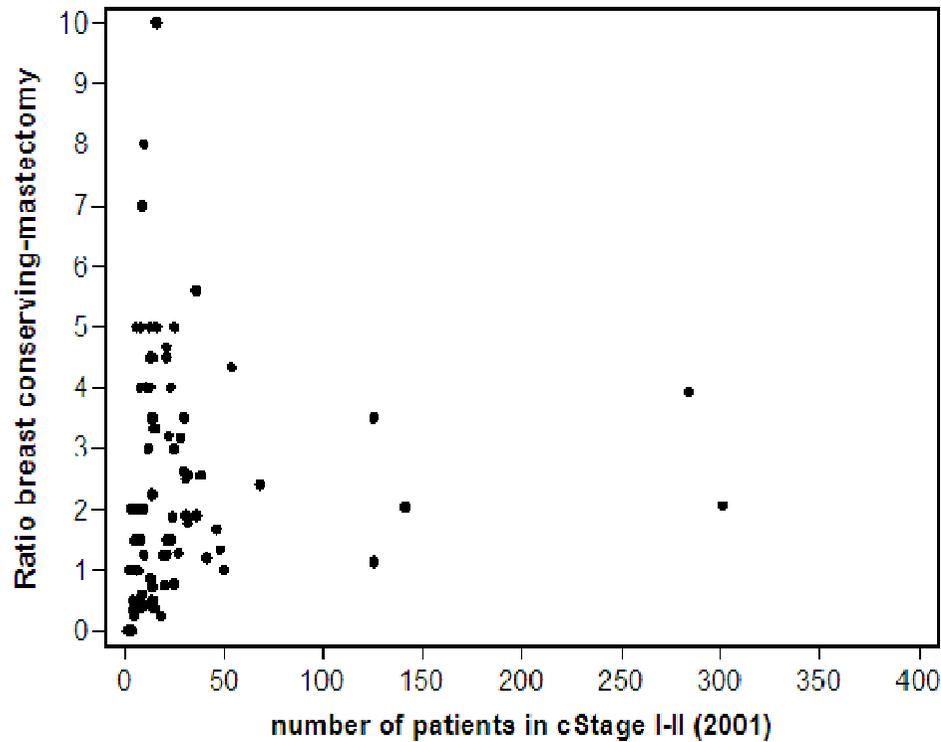
- Patients with breast cancer
 - all patients: N = 50.039
 - Missing stage
 - No cStage for 23.942 cases
 - No pStage for 13.656 cases
 - From 2001 to 2006
- Data Source
 - Belgian Cancer Registry
 - Social security data (reimbursement codes)

Proportion of cStage I and II patients : BCS/M (2001-2006)

Table 25. Proportion of cStage I and II patients who undergo breast conserving surgery/mastectomy (IMA data, 2001-2006)

Year	Number of surgically treated women	% of surgically treated women	Number of women with BCS	% of women with BCS	Number of women with mastectomy	% of women with mastectomy	Ratio BCS/mastectomy
2001	2 276	93.0	1 352	55.3	924	37.8	1.463
2002	2 574	97.0	1 595	60.1	979	36.9	1.629
2003	3 824	96.8	2 362	59.8	1 462	37.0	1.616
2004	4 116	96.8	2 538	59.7	1 578	37.1	1.608
2005	3 842	96.4	2 280	57.2	1 562	39.2	1.460
2006	3 738	95.8	2 277	58.4	1 461	37.4	1.559
Total	20 370	96.1	12 404	58.5	7 966	37.6	1.556

Proportion of cStage I and II patients, BCS/M, per centre: 2001-2006



Proportion of women who underwent a mastectomy ½ to 1 year after BCS

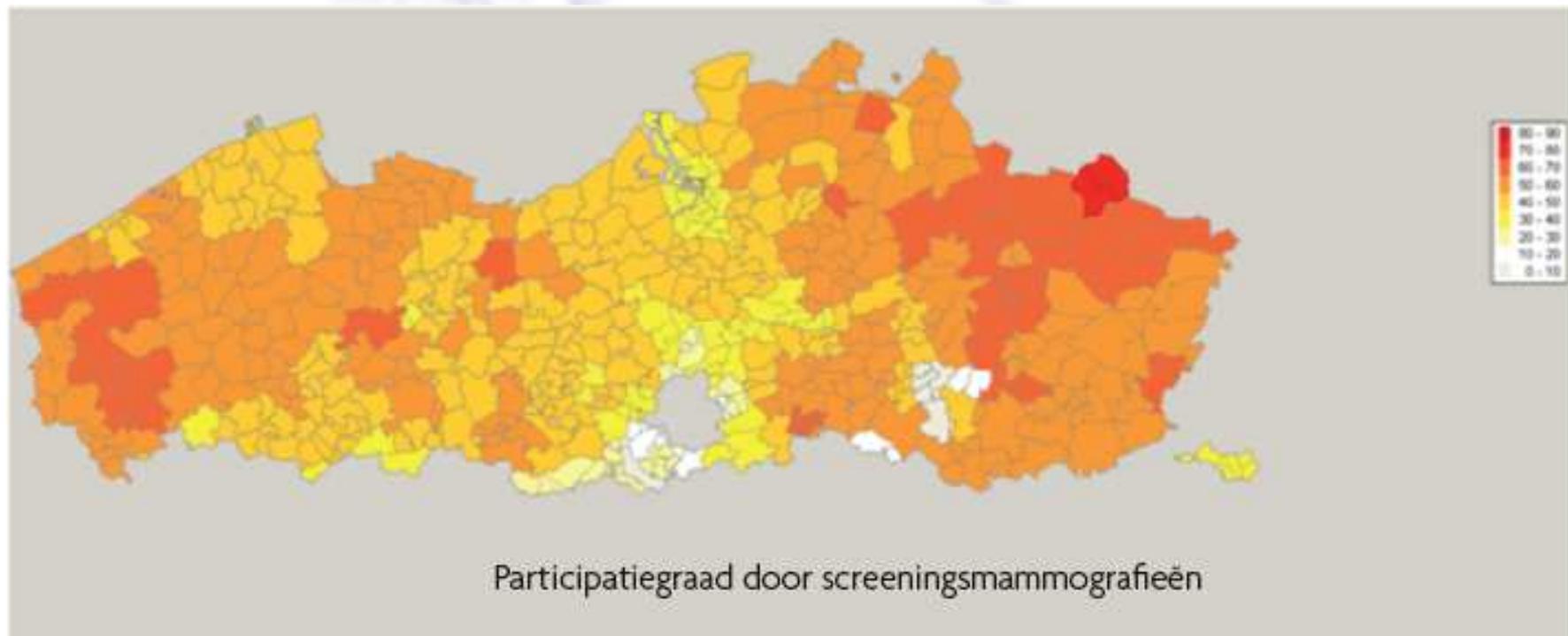
Table 64. Number and proportion of women who underwent a mastectomy 6 months or 1 year after a BCS (2001-2006).

	Denominator	Mastectomy within 6 months	Proportion (%)	Mastectomy within 1 year	Proportion (%)
2001	2 232	184	8.2	190	8.5
2002	2 504	197	7.9	208	8.3
2003	3 463	213	6.2	225	6.5
2004	3 840	228	5.9	243	6.3
2005	4 069	197	4.8	207	5.1
2006	4 268	197	4.6	212	5.0
Total	20 376	1 216	6.0	1 285	6.3

Screening trends in Belgium:2008-2009

- % BCS depends on the screening round
 - 1 round : <T1b: 23,4% 70,6% BCS
 - 2 round : <T1b: 30,0% 82,9% BCS
- Important geographic variation in screening participation in Flanders
 - Global result : 48% norm :>75%

Flanders: screening participation 2009

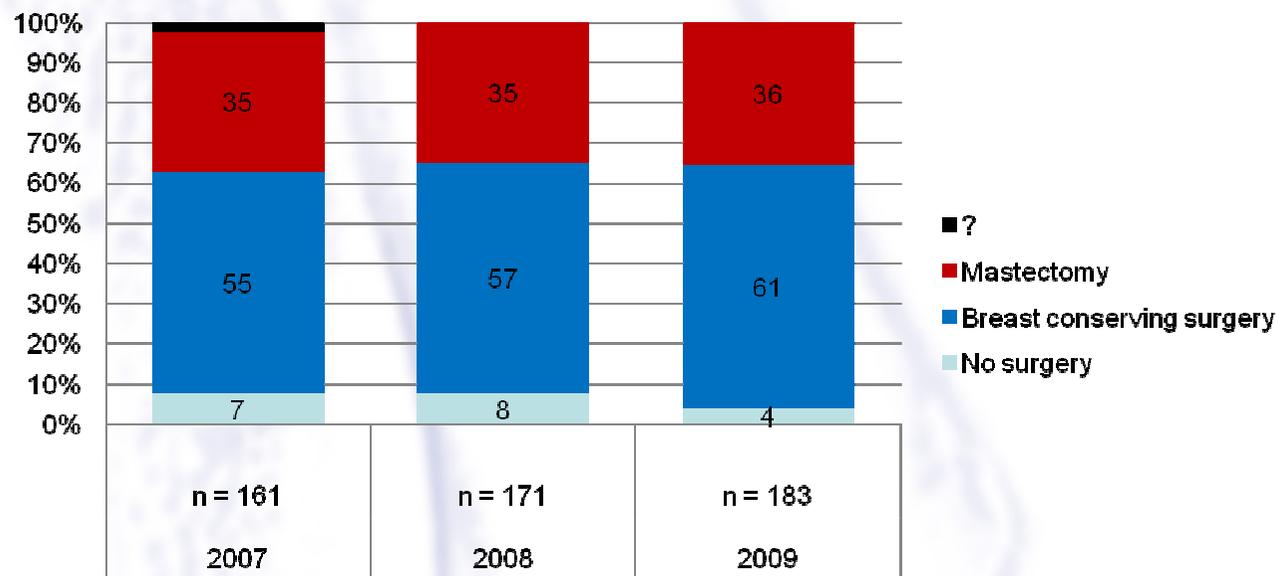


E. Van Limbergen et al. *Bevolkingsonderzoek naar borstkanker in Vlaanderen. Jaarrapport 2009*. Het Consortium van erkende regionale screeningscentra van de Vlaamse Gemeenschap; 2010.

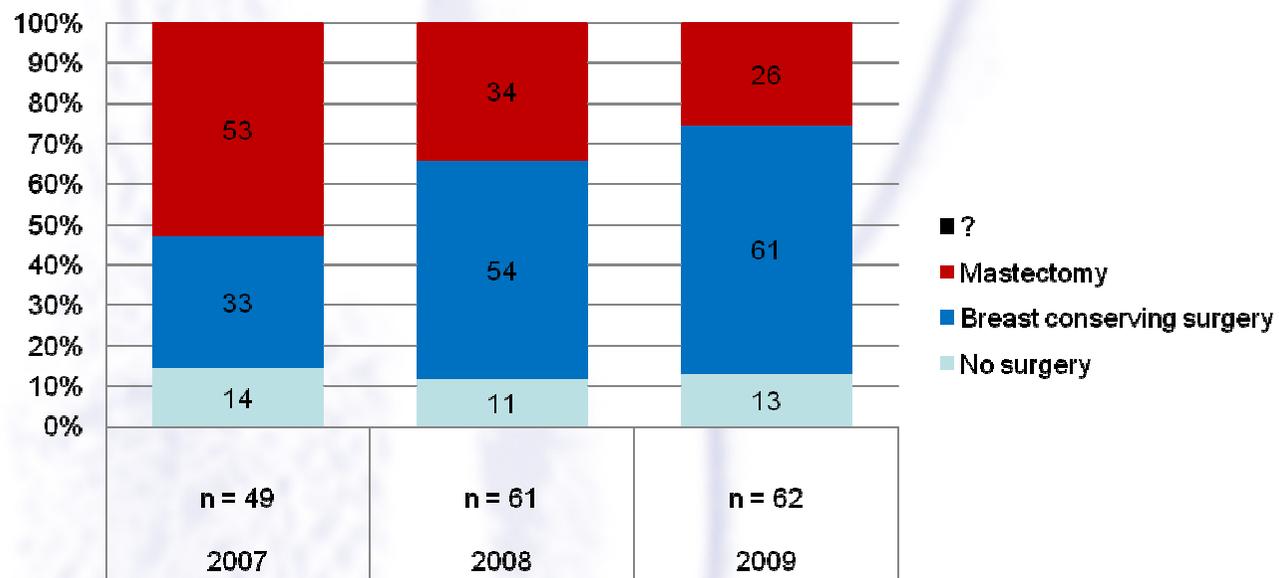
Single institution data : Breast Clinic Voorkempen

- % BCS / M : 2007-2009
 - AZ KLINA, Brasschaat
 - AZ Sint-Jozef, Malle
 - Decrease % Mastectomy, after reorganisation of one unit !

Breasttumours AZ KLINA 2007-2009
 (proportion Breast conserving surgery / Mastectomy)



Breasttumours AZ Sint-Jozef Malle 2007-2009
 (proportion Breast conserving surgery / Mastectomy)



Seno Network

- Network of European Breast Clinics
 - Recognition of breast centres and identify quality indicators
 - Synergy among breast units
 - Important registration part
- Actual situation:
 - 24 units participate on the European Data Base
 - Retrospective analysis of Mastectomy trend!
 - Participation of the majority of BC is required to obtain quality data !

What have we learned?

- The data are not conclusive
- The data are different and in contradiction
- Wide global variation
- The data are depending on different factors
 - Other stage
 - Other population
 - Other countries with other organisation of the health resources

What can influence the mastectomy rate ?

- Role of imaging: MRI ? “better” imaging, but no difference in DFS ?
- Optimal organisation of a screening program
- Pathological aspects and doctors attitude
- Genetic aspects and doctors attitude

What can influence the mastectomy rate?

- Role of oncoplastic surgery and attitude towards reconstruction
- Patients attitude and doctors perception
 - Different patients
 - Different doctors



Is % of BCS a quality indicator

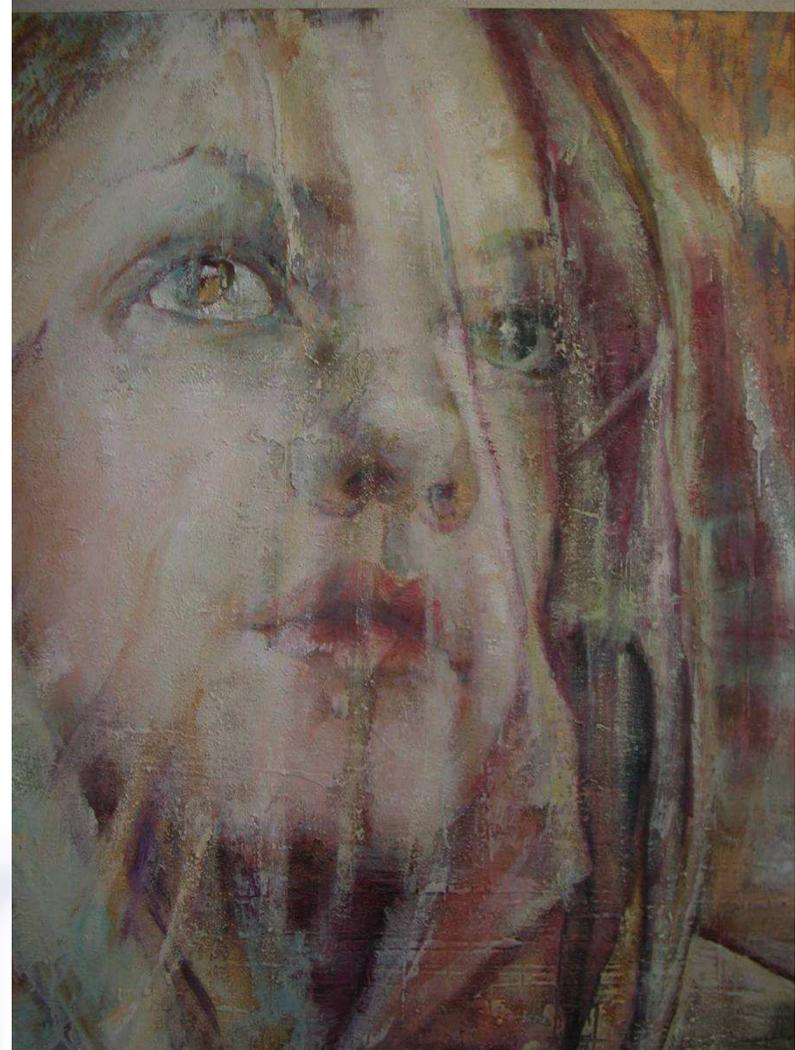
“Probably” YES,

BUT interpretation must be in function of

- Proportion of women who underwent mastectomy after “1 year”, recurrence free survival
- Site specificity
 - Different age
 - Different tumour characteristics
 - Different genetic background
 - Local screening program
- Patient demand
 - Country and health resource specific

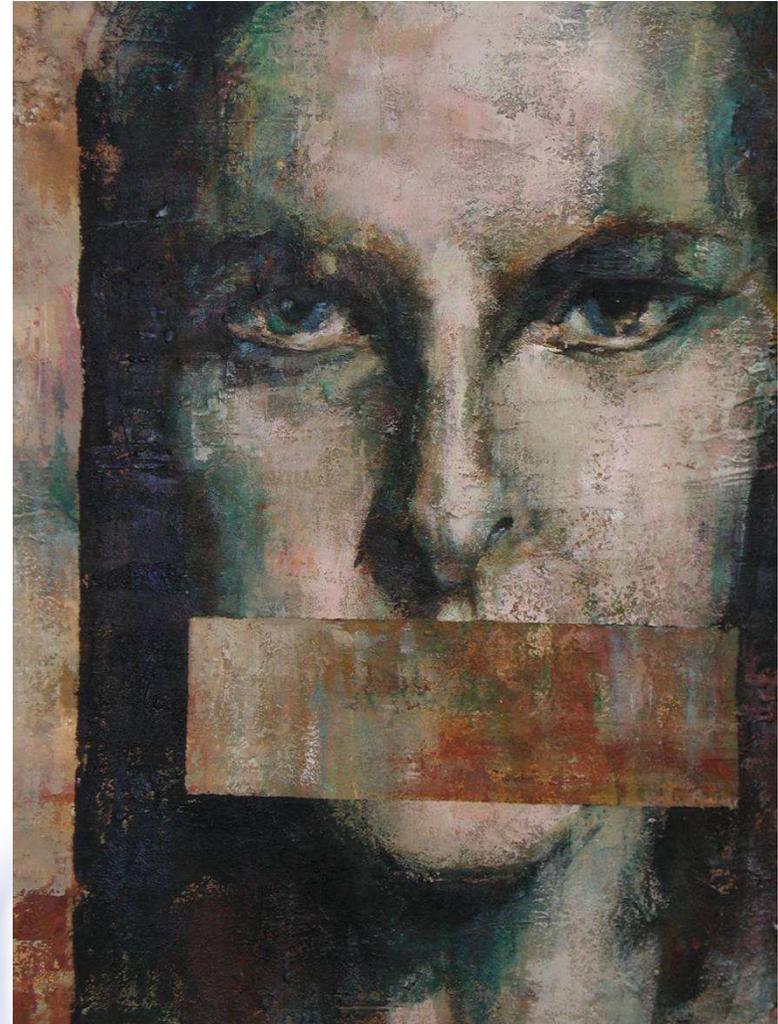
Conclusion 1

- Mastectomy is one of the most dramatic events after diagnosis of breast cancer
- Study of real trends in our breast clinics is very important as well as the differences between
- Study of the factors that influence the differences is crucial: why a rise in reference centres ?



Conclusion 2

- The data must come from as much Breast Clinics as possible and a European registration system must be accessible to the majority of breast clinics
- The aim is to identify and constantly adapt guidelines for mastectomy in the light of the evolution of sciences



Conclusion 3

- Caution with generalisation of single institution , or single nation data !
- Caution with identifying quality indicators !
- Caution with comparison of different units in the same and other countries !
- **MULTIDISCIPLINARY MEETINGS WITH ALL DIFFERENT SPECIALITIES IS MANDATORY !**



Thanks !

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