ESMO PRECEPTORSHIP ON BREAST CANCER

10-11 NOVEMBER 2017
LISBON, PORTUGAL

Principles of Breast Surgery
Oncoplastic Surgery

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Conflict of Interest Disclosure

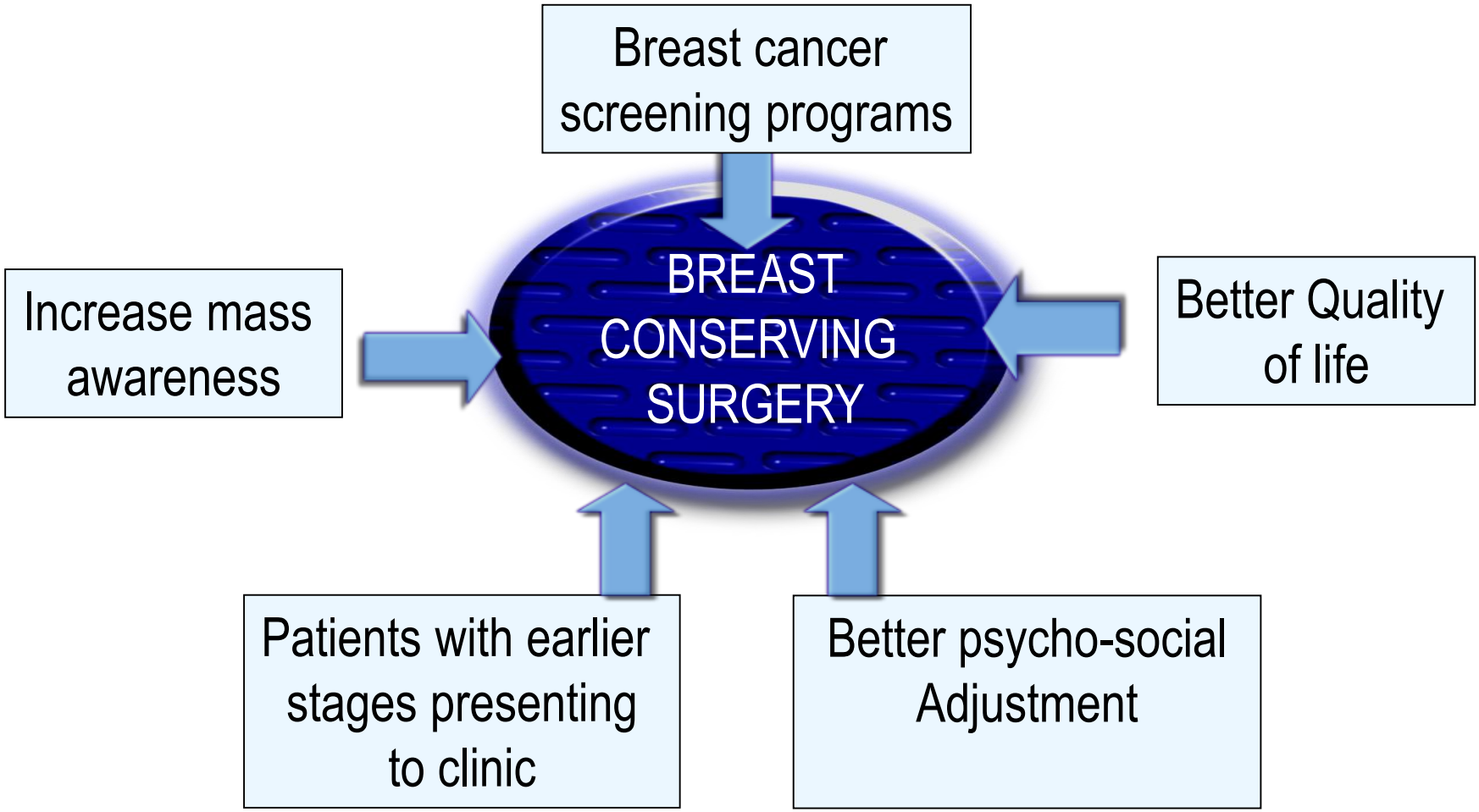
- No financial relationships to disclose

Locorregional therapy for early breast cancer

- Conservative (BCT) vs Mastectomy
- Oncoplastic Surgery
- Delayed Reconstruction vs Immediate Reconstruction
- Total mastectomy vs Skin Sparing Mastectomy
- Surgery after primary systemic treatment (PST)
- Sentinel Node vs Axillary dissection

Overview of guidelines on breast screening: Why recommendations differ and what to do about it
Karsten Juhl Jørgensen, Mette Kalager, Alexandra Barratt, Cornelia Baines, Per-Henrik Zahl, John Brodersen, Russell P. Harris
Overdiagnosis in breast imaging
Andy Evans, Sarah Vinnicombe
Finding the balance between over- and under-treatment of ductal carcinoma in situ (DCIS)
Emma J. Groen, Lotte E. Elshof, Lindy L. Visser, Emiel J. Th. Rutgers, Hillegonda A.O. Winter-Warnars, Esther H. Lips, Jelle Wesseling
Oversurgery in invasive breast cancer
Fiona MacNeill
Overexploring and overtreating the axilla
Viviana Galimberti, Giovanni Corso, Simonetta Monti, Gianmatteo Pagani
Over-irradiation
Philip M.P. Poortmans, Meritxell Arenas, Lorenzo Livi
Over-using chemotherapy in the adjuvant setting
Giuseppe Curigliano, Carmen Criscitiello, Angela Esposito and Giancarlo Pruneri
Over-treatment in metastatic breast cancer
Elżbieta Senkus, Aleksandra Łacko
Imaging in the evaluation and follow-up of early and advanced breast cancer: When, why, and how often?
Brittany L. Bychkovsky, Nancy U. Lin

- Conservative (BCT) vs Mastectomy



- Conservative (BCT) vs Mastectomy

MRM vs BCT

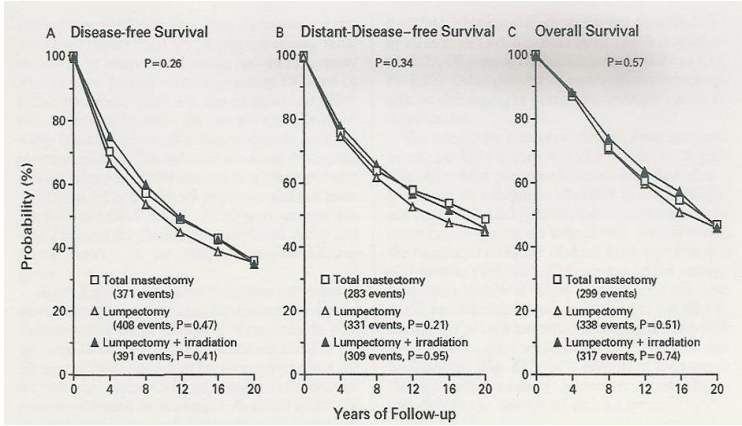
Randomized trials

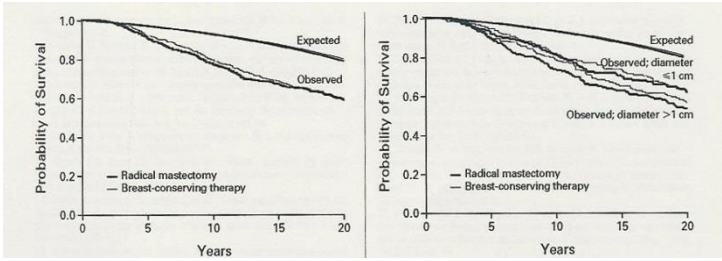
Meta-analysis

Comparable local control, Overall survival

Better cosmetic outcome

Conservative (BCT) vs Mastectomy





Fisher B. et al.(2002).
"Twenty-year follow-up of a randomized trial comparing total mastectomy, lumpectomy and lumpectomy plus irradiation for the treatment of invasive breast cancer. "
N Engl J Med **347**(16): 1233-41.

Veronesi U. et al. (2002).
"Twenty-year follow-up of a randomized study comparing breast-conserving surgery with r adical mastectomy for early breast cancer."
N Engl J Med 347(16): 1227-32.

…..as long as a good aesthetic outcome is obtained

Conservative (BCT) vs Mastectomy

Figure 1. Temporal Trends in Surgical Treatment of Early Breast Cancer

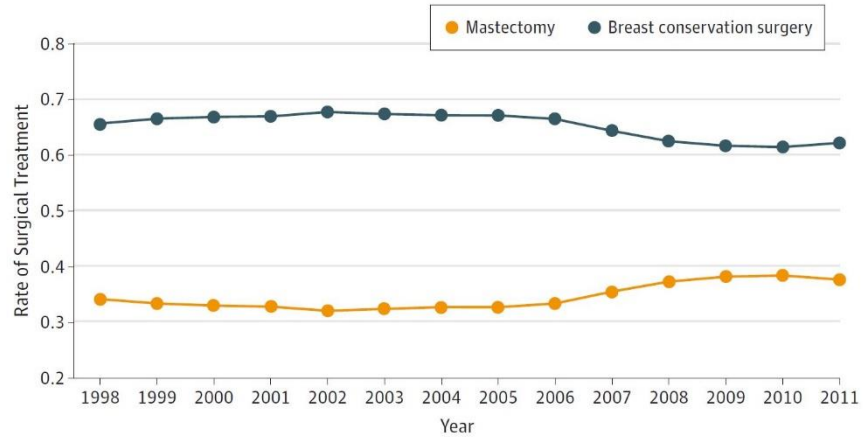
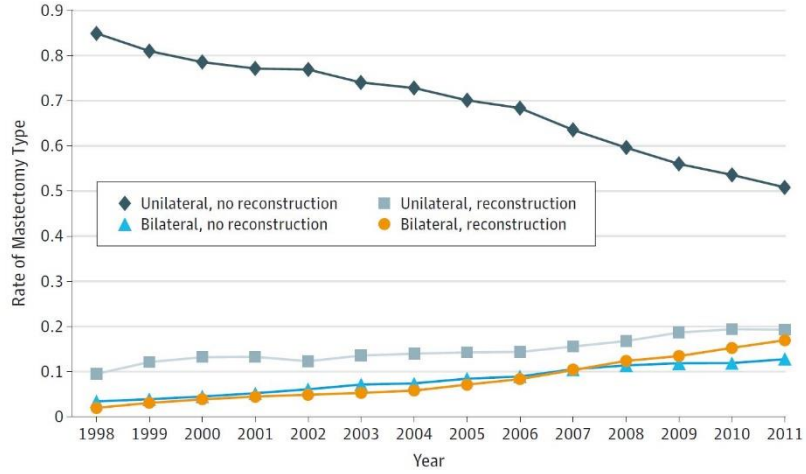
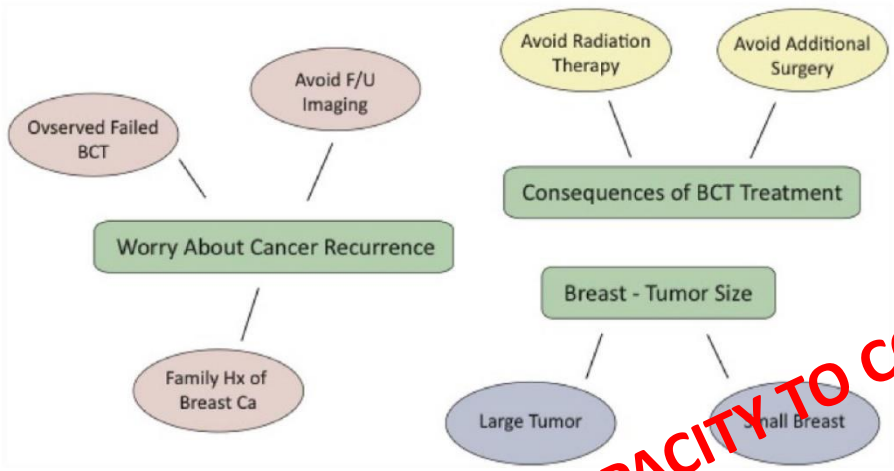


Figure 3. Temporal Trends in Type of Mastectomy for Early Breast Cancer



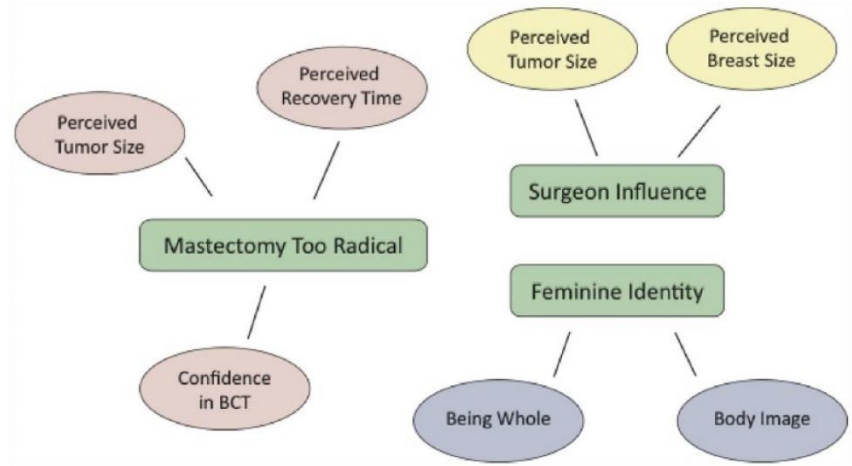
Kummerow K
JAMA Surg 2015

Conservative (BCT) vs Mastectomy



Thematic map for mastectomy participants. BCT indicates breast conserving therapy; F/U, follow-up; Hx, history.

PHYSICIANS INCAPACITY TO COMUNICATE RISK



Thematic map for breast conserving therapy (BCT) participants.

Gu J.
Clin Med Insights Oncol. 2017

Conservative (BCT) vs Mastectomy

Original Investigation

Effect of Breast Conservation Therapy vs Mastectomy on Disease-Specific Survival for Early-Stage Breast Cancer

Shailesh Agarwal, MD; Lisa Pappas, MS; Leigh Neumayer, MD; Kristine Kokeny, MD; Jayant Agarwal, MD

	BCT	Mastectomy	Mastectomy+RT	p value
132 149	70%	27%	3%	
5Y BCSSR	97%	94%	90%	<.001
10Y BCSSR	94%	90%	83%	<.001

CONCLUSIONS AND RELEVANCE Patients who underwent BCT have a higher breast cancer–specific survival rate compared with those treated with mastectomy alone or mastectomy with radiation for early-stage invasive ductal carcinoma. Further investigation is warranted to understand what may be contributing to this effect.

JAMA Surg. 2014 Mar;149(3):267-74

The Breast 35 (2017) 32–33

Contents lists available at ScienceDirect

The Breast

journal homepage: www.elsevier.com/brst

Viewpoints and debate

Less is more. Breast conservation might be even better than mastectomy in early breast cancer patients

Oreste D. Gentilini [a,*], Maria-Joao Cardoso [b], Philip Poortmans [c]

[a] San Raffaele University and Research Hospital, Milano, Italy
[b] Breast Unit, Champalimaud Foundation, Lisbon, Portugal
[c] Department of Radiation Oncology, Institut Curie, Paris, France

"Sometimes patients demand a mastectomy, driven by fear and the desire of getting rid of the disease while ignoring all this new information. It is important to inform them properly that, in most cases, breast cancer can be cured maybe even better without the need to be separated from of their breasts."

institutCurie | NOUS REJOINDRE | NOUS CONTACTER | PRENDRE RENDEZ-VOUS | GRAND PUBLIC ET DONATEURS | FR | FAIRE UN DON

QUI SOMMES-NOUS ? | COMPRENDRE LE CANCER | NOUS SOUTENIR | A LA UNE | EVÉNEMENTS | OCTOBRE ROSE 2017

Accueil » Cancer du sein : plaidoyer en faveur de la chirurgie conservatrice

ACTUALITÉ - CANCERS DU SEIN

CANCER DU SEIN : PLAIDOYER EN FAVEUR DE LA CHIRURGIE CONSERVATRICE

Céline Giustranti - 04/10/2017 PARTAGER

Dans un article du journal médical The Breast, 3 spécialistes européens des cancers du sein dont le radiothérapeute de l'Institut Curie, Philip Poortmans, recommandent de privilégier la chirurgie conservatrice du sein en lieu et place d'une ablation totale pour les cancers du sein de stade précoce.

uicc global cancer control

IJC International Journal of Cancer

Breast conserving therapy and mastectomy revisited: Breast cancer-specific survival and the influence of prognostic factors in 129,692 patients

Mirelle Lagendijk[1†], Marissa C. van Maaren[2,3†], Sepideh Saadatmand[4], Luc J.A. Strobbe[5], Philip M.P. Poortmans[6], Linetta B. Koppert[1], Madeleine M.A. Tilanus-Linthorst[1] and Sabine Siesling[2,3]

Gentilini 2017, Breast
Van Maaren 2017 IJC

Conservative (BCT) vs Mastectomy

Contra-indications for BCT

In aggregate, in the following clinical situations the increased risk of breast relapse should be extensively discussed with the patient and breast conservation should be executed with caution:

- very young woman (<35 years),
- the presence of extensive DCIS (heralded by extensive microcalcifications) mounting up to one quarter of the breast,
- more than focally incomplete resection of an invasive or in situ cancer,
- and in the case that radiotherapy cannot be given.

In all other clinical situations breast conservation is a safe option, provided complete resections are achieved and good cosmetic outcome is secured.

Breast. 2013 Aug;22 Suppl 2:S110-4.
Who should not undergo breast conservation?
Nijenhuis MV1, Rutgers EJ.

Curr Treat Options Oncol. 2015 Apr;16(4):16.
Breast cancer under age 40: a different approach.
Ribnikar D1, Ribeiro JM, Pinto D, Sousa B, Pinto AC, Gomes E, Moser EC, Cardoso MJ, Cardoso F.

Conservative (BCT) vs Mastectomy

Margins

The association of surgical margins and local recurrence in women with early-stage invasive breast cancer treated with breast-conserving therapy: a meta-analysis.
Houssami N1, Macaskill P, Marinovich ML, Morrow M.
Ann Surg Oncol. 2014 Mar;21(3):717-30.

Society of Surgical Oncology-American Society for Radiation Oncology consensus guideline on margins for breast-conserving surgery with whole-breast irradiation in stages I and II invasive breast cancer.
Moran MS1, Schnitt SJ, Giuliano AE, Harris JR, Khan SA, Horton J, Klimberg S, Chavez-MacGregor M, Freedman G, Houssami N, Johnson PL, Morrow M
Ann Surg Oncol. 2014 Mar;21(3):704-16
J Clin Oncol. 2014 Feb 10
Int J Radiat Oncol Biol Phys. 2014 Mar 1;88(3):553-64

Conservative (BCT) vs Mastectomy

1. Positive margins

A positive margin, defined as ink on invasive cancer or ductal carcinoma in situ (DCIS), is associated with at least a 2-fold increase in IBTR. This increased risk in IBTR is not nullified by:

a) Delivery of a boost dose of radiation

b) Delivery of systemic therapy (endocrine therapy, chemotherapy, or biologic therapy), or

c) Favorable biology

2. Negative margin widths

Negative margins (no ink on tumor) minimize the risk of IBTR. Wider margin widths do not significantly lower this risk. The routine practice to obtain negative margin widths wider than no ink on tumor is not indicated.

3. Systemic therapy

The rates of IBTR are reduced with the use of systemic therapy. In the uncommon circumstance of a patient not receiving adjuvant systemic therapy, there is no evidence suggesting that margins wider than no ink on tumor are needed.

4. Biologic subtypes

Margins wider than no ink on tumor are not indicated based on biologic subtype.

- Conservative (BCT) vs Mastectomy

5. Radiation therapy delivery

The choice of WBRT delivery technique, fractionation, and boost dose should not be dependent on margin width.

6. Invasive lobular carcinoma and lobular carcinoma in situ

Wider negative margins than no ink on tumor are not indicated for invasive lobular carcinoma (ILC). Classic lobular carcinoma in situ (LCIS) at the margin is not an indication for re-excision. The significance of pleomorphic LCIS at the margin is uncertain.

7. Young age

Young age (≤40 years) is associated with both increased IBTR after BCT as well as increased local relapse on the chest wall after mastectomy, and is also more frequently associated with adverse biologic and pathologic features. There is no evidence that increased margin width nullifies the increased risk of IBTR in young patients.

8. Extensive intra ductal component

Extensive intra ductal component (EIC) identifies patients who may have a large residual DCIS burden after lumpectomy. There is no evidence of an association between increased risk of IBTR and EIC when margins are negative.

Conservative (BCT) vs Mastectomy

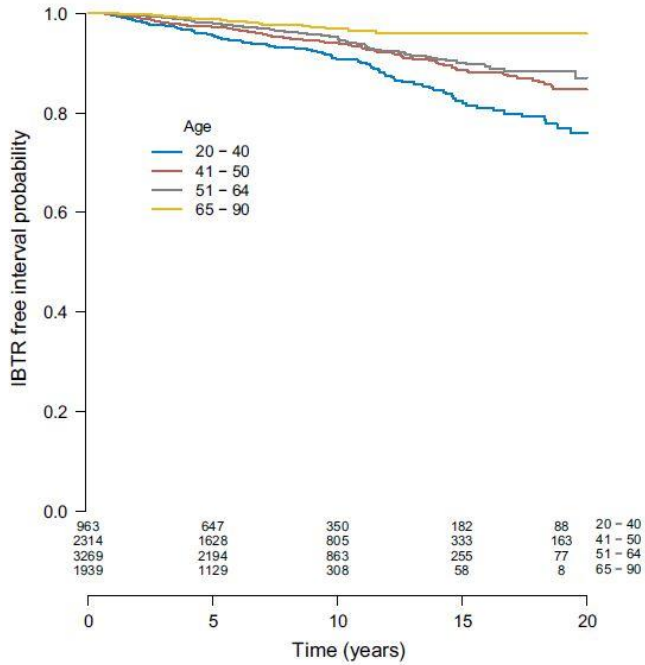


Fig. 2 IBTR-free interval by age group

The margin status of invasive carcinoma did not influence IBTR, DM rate, or OS. Between 1980 and 2008, locoregional
control after BCT remained stable with low IBTR rates, even in young patients.

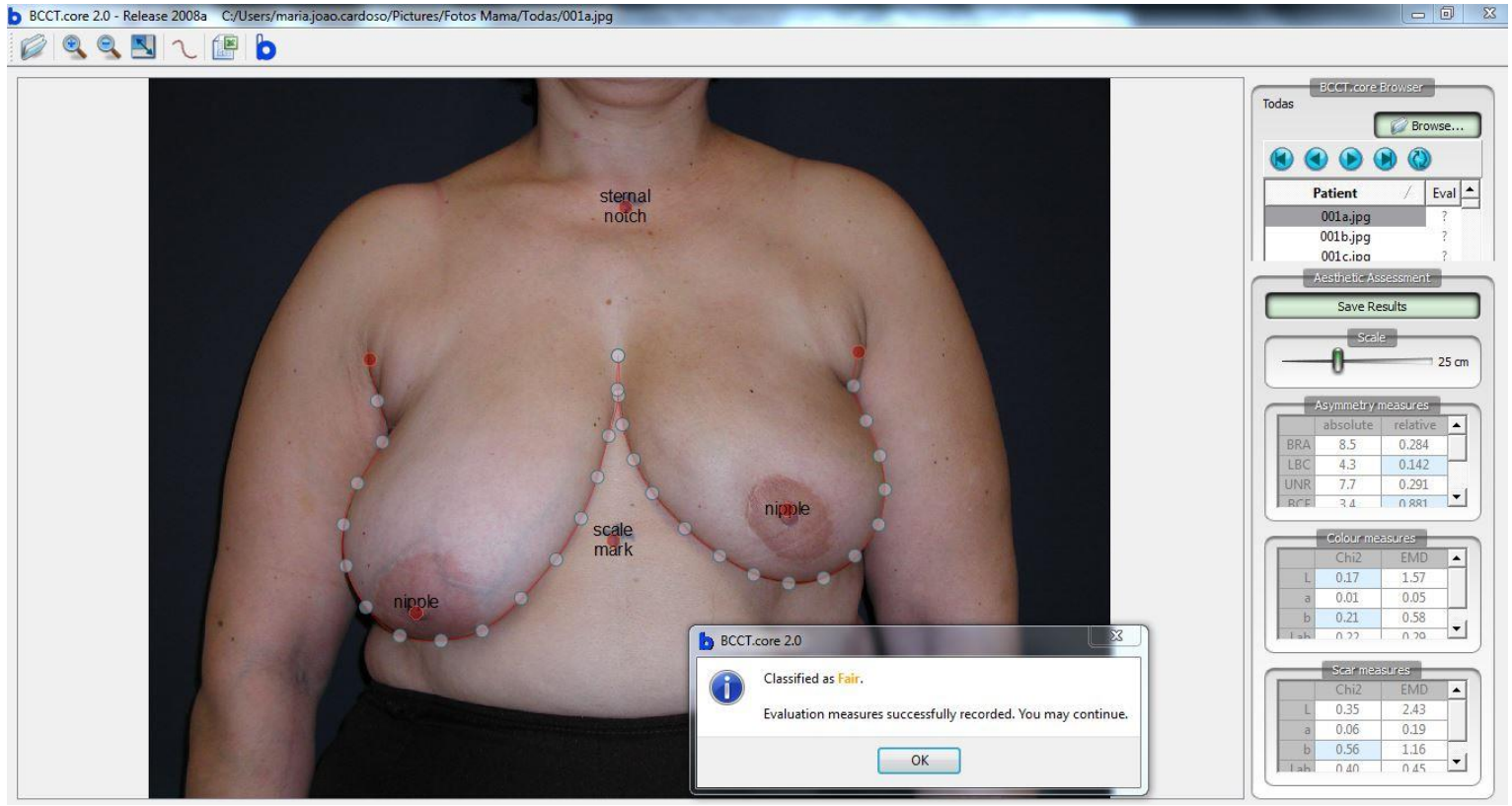
Breast Cancer Res Treat. 2016 Apr;156(2):391-400.
Very low local recurrence rates after breast-conserving therapy: analysis of 8485 patients treated over a 28-year period.
Bosma SC, van der Leij F, van Werkhoven E, Bartelink H, Wesseling J, Linn S, Rutgers E, van de Vijver M, Elkhuizen PH

- Conservative (BCT) vs Mastectomy

Still 30% of fair/poor results

Can we improve those results

Conservative (BCT) vs Mastectomy



http://medicalresearch.inescporto.pt/breastresearch

Artif Intell Med. 2007 Jun;40(2):115-26. Epub 2007 Apr 8.
Towards an intelligent medical system for the aesthetic evaluation of breast cancer conservative treatment.
Cardoso JS1, Cardoso MJ.

Oncoplastic Surgery

When a resection of more than 20% of breast volume is planned oncoplastic techniques are recommended and can prevent major deformities

Current approaches to managing partial breast defects: the role of conservative breast surgery reconstruction.
Munhoz AM1, Montag E, Filassi JR, Gemperli R.
Anticancer Res. 2014 Mar;34(3):1099-114.

Oncoplastic Surgery

- Oncoplastic surgery is **tumor specific immediate breast reconstruction**.
- It represents the **integration of plastic surgery techniques into breast cancer surgery** in order to preserve aesthetical outcomes and quality of life of the patients, without compromising local control of disease.
- It is based on three surgical principles: **ideal breast cancer surgery with free tumour margins, immediate breast reconstruction, and immediate symmetry with the other breast.**
- Although the **word was originally coined by Werner Audrescht** in Germany in the 1990's, plastic surgery techniques were transposed into breast-conserving therapy to avoid late unsatisfactory aesthetic results in the 1980's France by Jean-Yves Petit (Institut Goustave- Roussy), Jean-Yves Bobin (Centre Leon-Berard) and Michel Abbes (Centre Lassagne).

Oncoplastic Surgery

Concept background

- At the beginning limited to conservative surgery
- Correction of previous defects
- Use of aesthetic concepts in cancer

- Oncoplastic Surgery

Concept evolution

- correct oncological surgery
- local reconstruction to correct excision defects
- immediate or delayed reconstruction with access to all techniques
- asymmetry correction on both sides

Oncoplastic breast surgery--a guide to good practice.
On behalf of BASO, BAPRAS and TIGBS
Eur J Surg Oncol. 2007 Aug;33 Suppl 1:S1-23. Epub 2007 Jul 2

Oncoplastic Surgery

Although oncoplastic surgery is considered to be a major technical improvement it is associated with larger scars, increased complications and an increasing need for contralateral breast surgery

Oncoplastic Surgery

The Breast xxx (2010) 1–3

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The Breast

journal homepage: www.elsevier.com/brst

Viewpoints and Debate

Training in oncoplastic surgery: An international consensus. The 7th Portuguese Senology congress, Vilamoura, 2009

Maria João Cardoso [a], R Douglas Macmillan [b], Belén Merck [c], Alexandre Mendonça Munhoz [d], Richard Rainsbury [e,*]

[a] Breast Center, Hospital S. João, Al. Prof. Hernani Monteiro, 4200-319 Porto, Portugal
[b] Nottingham Breast Institute, City Hospital, Nottingham NG5 1PB, UK
[c] Surgery Department, Fundación Instituto Valenciano de Oncologia, calle Beltrám Báguena 8,46009 Valencia, Spain
[d] Division of Plastic Surgery, University of São Paulo School of Medicine, Rua da Consolação 3605 ap 91, 01461-001 São Paulo, Brazil
[e] Oncoplastic Breast Unit, Royal Hampshire County Hospital, Romsey Road, Winchester, Hampshire SO21 1QF, UK

- ## Oncoplastic Surgery

Pros

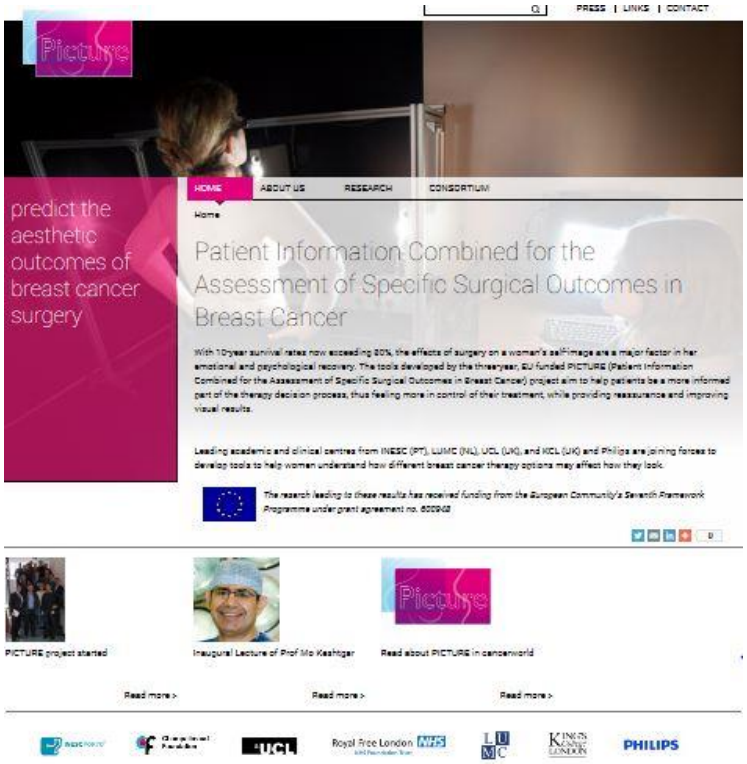
- Wider excisions - Better margins
- Less recurrences
- Overall better cosmetic outcomes

Cons

- Trained teams
- Higher cost
- Higher complication rate
- Possible delay of adjuvant treatments

Which technique to use for each case?

- Oncoplastic Surgery



http://www.vph-picture.eu/

Oncoplastic Surgery

TABLE 1. Articles Included in Systematic Review

Reference	Year	Patients/Cases	Mean/Median Follow-up, mo	Oncologic Outcomes Described	Patient or Aesthetic Outcomes Described
Barnea et al[1]	2014	20/22	34.7	No	Yes
Caruso et al[21]	2008	61/63	68	Yes	No
Caruso et al[22]	2011	50/52	72.6	Yes	No
Chang et al[10]	2004	37/37	NR	Yes	Yes
Chang et al[6]	2012	79/85	39	Yes	No
Clough et al[4]	2012	175/175	49	Yes	Yes
Currie et al[23]	2013	20/20	36	Yes	No
Denewer et al[24]	2012	50/50	20	Yes	Yes
Eaton et al[35]	2014	86/86	54	Yes	No
Grubnik et al[17]	2013	251/251	50	Yes	Yes
Gulcelik et al[20]	2013	106/106	33	Yes	No
Imahiyerobo et al[25]	2014	64/64	34.6	Yes	No
Losken et al[26]	2007	63/63	40	Yes	No
Losken et al[9]	2014	83/83	NR	No	No
McCulley and Macmillan[18]	2005	50/50	NR	Yes	Yes
Munhoz et al[15]	2011	106/106	47	Yes	Yes
Santanelli et al[19]	2009	11/11	26.5	Yes	Yes

Outcomes Following Oncoplastic Reduction Mammoplasty: A Systematic Review.
Piper ML, Esserman LJ, Sbitany H, Peled AW.
Ann Plast Surg. 2016 May;76 Suppl 3:S222

Oncoplastic Surgery

TABLE 2. Articles Reporting Local-Regional and Distant Recurrence Rates

Reference	Patients/Cases	Mean/Median Follow-up, mo	Stages Included	Local-Regional Recurrence Rate	Distant Recurrence Rate
Caruso et al[21] (2008)*	61/63	68	I to III	1 (1.6%)	6 (9.8%)
Caruso et al[22] (2011)*	50/52	72.6	0 to IIIB	1 (1.9%)	1 (2%)
Chang et al[10] (2004)	37/37	NR	NR	0	0
Chang et al[6] (2012)	79/85	39	0 to IV	2 (2.3%)	2 (2.3%)
Clough et al[4]	175/175	49	NR	3 (1.7%)	11 (6.3%)
Currie et al[23]	20/20	36	I and II	0	0
Denewer et al[24]*	50/50	20	I and II	0	0
Eaton et al[35]	86/86	54	0 to III	6 (7%)	1 (1.2%)
Grubnik et al[17]*	251/251	50	NR	6 (2.4%)	3 (1.2%)
Gulcelik et al[20]	106/106	33	I to III	1 (0.9%)	NR
Imahiyerobo et al[25]	64/64	34.6	0 to III	5 (7.8%)	2 (3.1%)
Losken et al[26]	63/63	40	0 to III	2 (3.2%)	0
McCulley and Macmillan[18]	50/50	NR	≥III	0	0
Munhoz et al[15]*	106/106	47	NR	7 (6.6%)	NR
Santanelli et al[19]	11/11	26.5	I and II	0	0

*Studies that utilized intraoperative frozen section.

Outcomes Following Oncoplastic Reduction Mammoplasty: A Systematic Review.
Piper ML, Esserman LJ, Sbitany H, Peled AW.
Ann Plast Surg. 2016 May;76 Suppl 3:S222

- Delayed Reconstruction vs Immediate Reconstruction

Is immediate autologous breast reconstruction with postoperative radiotherapy good practice?: a systematic review of the literature.
Schaverien MV, Macmillan RD, McCulley SJ.
J Plast Reconstr Aesthet Surg 2013; 66: 1637-1651.

- Delayed Reconstruction vs Immediate Reconstruction

- Delayed Reconstruction vs Immediate Reconstruction

Delayed Reconstruction vs Immediate Reconstruction

- Reconstruction should be offered to all mastectomy patients and all techniques should be discussed even if not available locally.
- Immediate reconstruction can be performed in the majority of patients and does not reduce radiation efficacy.
- Patients who will probably need radiotherapy should be advised about the possibility of a poorer cosmetic outcome

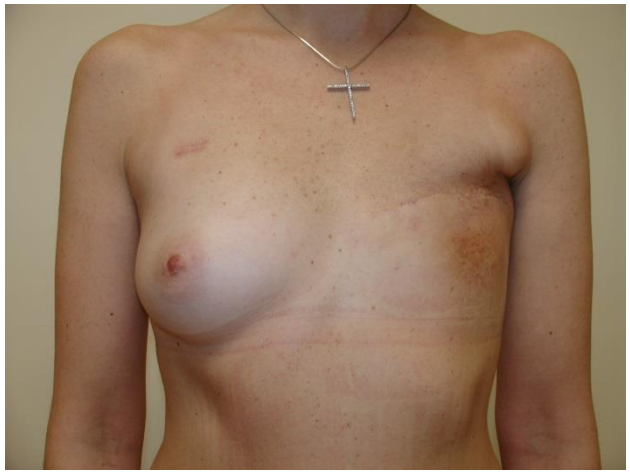
Total mastectomy vs Skin Sparing Mastectomy

Breast Reconstruction following Nipple-Sparing Mastectomy: Predictors of Complications, Reconstruction Outcomes, and 5-Year Trends.
Colwell AS, Tessler O, Lin AM et al.
Plast Reconstr Surg 2014; 133: 496-506.

iNSPiRE

INTERNATIONAL NIPPLE SPARING MASTECTOMY REGISTRY

- Total mastectomy vs Skin Sparing Mastectomy




- Total mastectomy vs Skin Sparing Mastectomy

- Surgery after primary systemic treatment (PST)

…..without ever forgetting the importance of each discipline

Surgery after primary systemic treatment (PST)

- Primary systemic treatment (PST) is responsible for a greater percentage of BCT.

.

- All patients proposed to PST should have their tumor marked before initiating treatment.

- Candidates to PST are those whose tumor breast size ratio doesn't allow conservative treatment with a favorable cosmetic outcome and those with locally advanced breast cancer (LABC).

- Biologic subtypes - Her2 positive/triple negative -" if not stage I "
(benefit of PST upfront)

SELECTION CRITERIA FOR BEST CANDIDATES

Factors that can predict high likelihood for pCR

TNBC, high grade, high Ki67in ER +, HER+, young age

Higher likelihood:	
Age:	< 40 years
Tumor size:	< 2 cm
Histology:	ductal
Grade:	high (G3)
Proliferation:	highKi67
ER:	negative
Intrinsic subtype:	Basal-like or HER2-enriched

Lower likelihood:	
Age:	≥ 60 years
Tumor size:	> 4 cm
Histology:	lobular
Grade:	low (G1)
Proliferation:	low Ki67
ER:	positive
Intrinsic subtype:	luminal A

Kaufmann et al. Ann Surg Oncol. 2011

- Surgery after primary systemic treatment (PST)
    - Initial work-up of locorregional disease
    - Monitoring response to treatment
    - Axillary approach
    - BCS after treatment
    - Reconstructive surgery

Surgery after primary systemic treatment (PST)

Pre-treatment work-up

Comparative Accuracy Studies	Number Studies (2050 patients)	P value	AUC
MRI Clinical	11	0.10	0.89 0.83
MRI Ultrasound	10	0.15	0.93 0.90
MRI Mammography	7	0.02	0.90 0.89

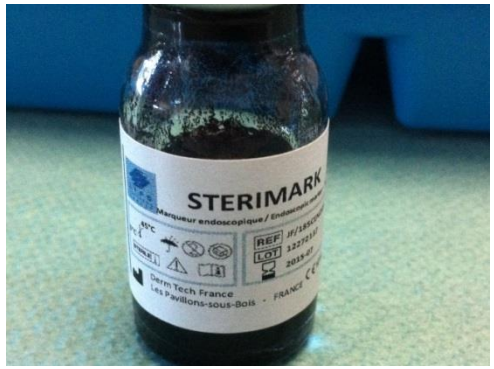
Meta-analysis of Magnetic Resonance Imaging in Detecting Residual Breast Cancer After Neoadjuvant Therapy.

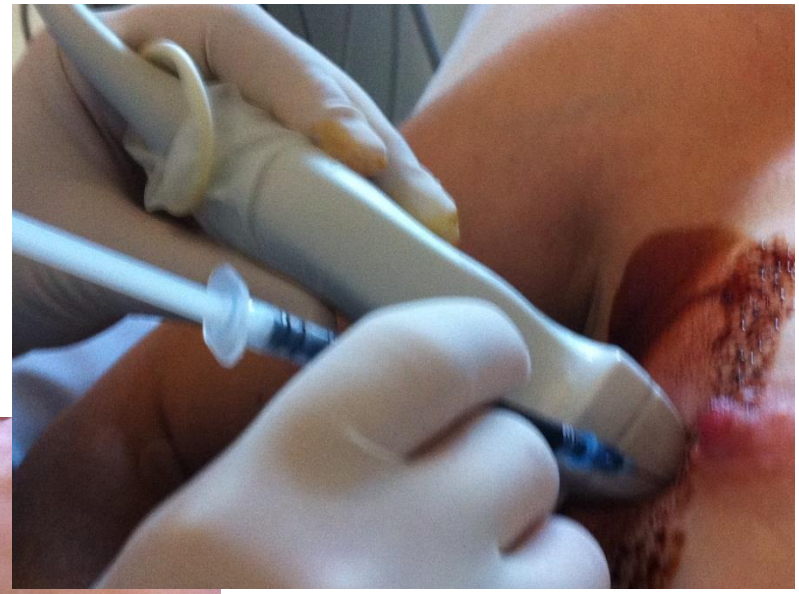
Marinovich ML, Houssami N, Macaskill P, Sardanelli F, Irwig L, Mamounas EP, von Minckwitz G, Brennan ME, Ciatto S.

J Natl Cancer Inst. 2013 Jan 7.

- Surgery after primary systemic treatment (PST)

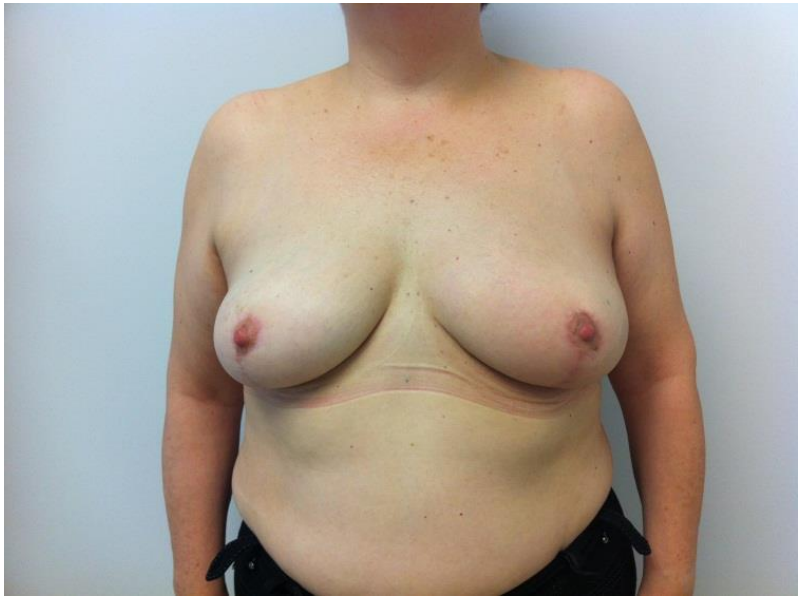
Tattoing





- Surgery after primary systemic treatment (PST)

- Surgery after primary systemic treatment (PST)



- Sentinel Node vs Axillary dissection

Sentinel node biopsy is actually considered standard of care in patients with clinically and ultrasound negative axillae

Sentinel Lymph Node Biopsy for Patients With Early-Stage Breast Cancer:
American Society of Clinical Oncology Clinical Practice Guideline Update.
Lyman GH, Temin S, Edge SB, Newman LA, Turner RR, Weaver DL, Benson AB 3rd, Bosserman LD, Burstein HJ, Cody H 3rd, Hayman J, Perkins CL, Podoloff DA, Giuliano AE.
J Clin Oncol. 2014 Mar 24. [Epub ahead of print]

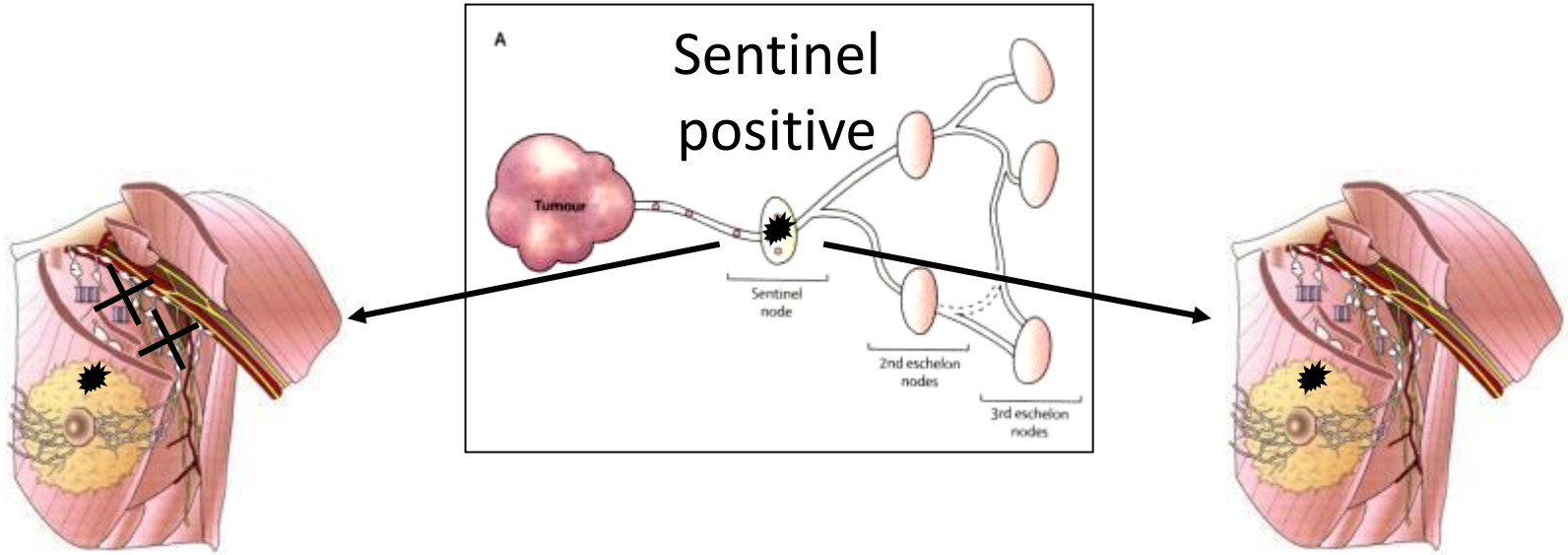
Sentinel Node vs Axillary dissection

Recommendations

- Recommendation 1: Clinicians should not recommend axillary lymph node dissection (ALND) for women with early-stage breast cancer who do not have nodal metastases. Type: evidence based; benefits outweigh harms. Evidence quality: high. Strength of recommendation: strong.
- Recommendation 2.1: Clinicians should not recommend ALND for women with early-stage breast cancer who have one or two sentinel lymph node metastases and will receive breast-conserving surgery (BCS) with conventionally fractionated whole-breast radiotherapy. Type: evidence based; benefits outweigh harms. Evidence quality: high. Strength of recommendation: strong.
- Recommendation 2.2: Clinicians may offer ALND for women with early-stage breast cancer with nodal metastases found on SNB who will receive mastectomy. Type: evidence based; benefits outweigh harms. Evidence quality: low. Strength of recommendation: weak.
- Recommendation 3: Clinicians may offer SNB for women who have operable breast cancer who have the following circumstances:
  - DCIS/mastectomy
  - Prior breast/axilllary surgery
  - PST
- Recommendation 4: There are insufficient data to change the 2005 recommendation that clinicians should not perform SNB for women who have early-stage breast cancer and are in the following circumstances:
  - LABC / Inflammatory
  - DCIS in BCS
  - Pregnancy – YES with radioisotope only

Omission of axillary dissection cN-, SLN+

- [1,2]ACOSOG Z0011



Axillary dissection
0.5% regional recurrence[1,2]

No axillary dissection
0.9%[1]→1.1%[2] regional recurrence

[1]Giuliano AE et al, Ann Surg. 2010 Sep;252(3):426-32.
[2]Giuliano AE et al, Ann Surg. 2016 Sep;264(3):413-20.

- Sentinel Node vs Axillary Dissection

Ongoing trials on axillary management

Z0011 validation

	Country/Name	Inclusion	Question	Endpoint	Start
1	China, „Z0011“	T1-2 cN0 1-2SN+	ALND vs no ALND in SLN pos	DFS	Jan 2013
2	France „Z0011“, SERC/IPC 2012-001	T1-2 cN0	ALND vs no ALND in SLN pos	DFS	July 2012
3	UK, Posnoc-Trial	T < 5cm 1-2 SN+	Adj syst. therapy alone vs. adj syst. therapy + ALND or ART	ARR	Jan 2014
4	Netherlands BOOG 2013–07	cT1-2 cN0	Ax. treatment vs no ax. treatment in SLN pos after mastectomy	RRR	June 2014
5	Sweden SENOMAC	T1-3 cN0 T1-3 iN1 1-2 SN+	ALND vs no ALND in SLN pos Amendment: After NACT	BCSS	Jan 2015
6	USA, Alliance A011202	T1-3cN1	ALND + RNI vs ART + RNI in SLN pos after NACT	IBC-RFI	Feb 2014
7	Germany, INSEMA	T1-2 cN0	no SLN vs. SLN; SLN pos → ALND vs no ALND (Z0011 validation) in all cases no RNI	DFS	Sept 2015
8	Italy, IEO S637/311 SOUND	T1cN0	No SLN vs SLN +/- ALND	DDFS	Jan 2012

Landin J and Weber WP. Breast Care (Basel). 2016 Aug;11(4):282-286.

- Sentinel Node vs Axillary Dissection

Omission of ALND in cN+ patients
Sentinel after chemotherapy

- cN+ → cN0: SLN-> back up ALND

	ACOSOG 1071	SENTINA	SN-FNAC	Swedish[1]
n	663	592	153	195
Identification	93%	80%	87.6%	77.9%
FNR overall	12.6%	14%	8.4%	14.1%
FNR with ≥ 3 SLN	9.1%	<10%	4.9% (≥ 2 SLN)	0
FNR with dual tracer	10.8%	8.6%	5.2%	13.4%

[1]Zetterlund LH, et al. Breast Cancer Res Treat. 2017 Feb 21.

Sentinel Node vs Axillary Dissection

- For patients with operable BC who are candidates for PST, ultrasound of the axilla and FNA/CB of suspicious lymph nodes should be considered as part of the staging workup.
- SNB before PST does not offer particular clinical advantages and reduces the number of patients who could benefit from the down-staging effect of PST in the axillary nodes.
- SNB after PST is feasible and accurate with similar performance to SNB before PST (bigger samples). Neo-adjuvant protocol.
- By performing SNB after PST, up to 40 percent of patients who present with minimal involvement of axillary nodes may be spared from axillary dissection.
- Caution is however required for patients who present with clinically (or pathologically) involved nodes before PST (until further results of prospective trials are obtained).

The Breast Team