

# LE ULTIME NOVITA' IN TERMINI DI CHIRURGIA

Torino , 26.9.2013

DANIELA TERRIBILE

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Policlinico  
**Gemelli**  
IMPEGNO PER L'ECCELLENZA



UNIVERSITÀ  
CATTOLICA  
del Sacro Cuore

# NOVITA' RADICALI ?????

SI

e

NO

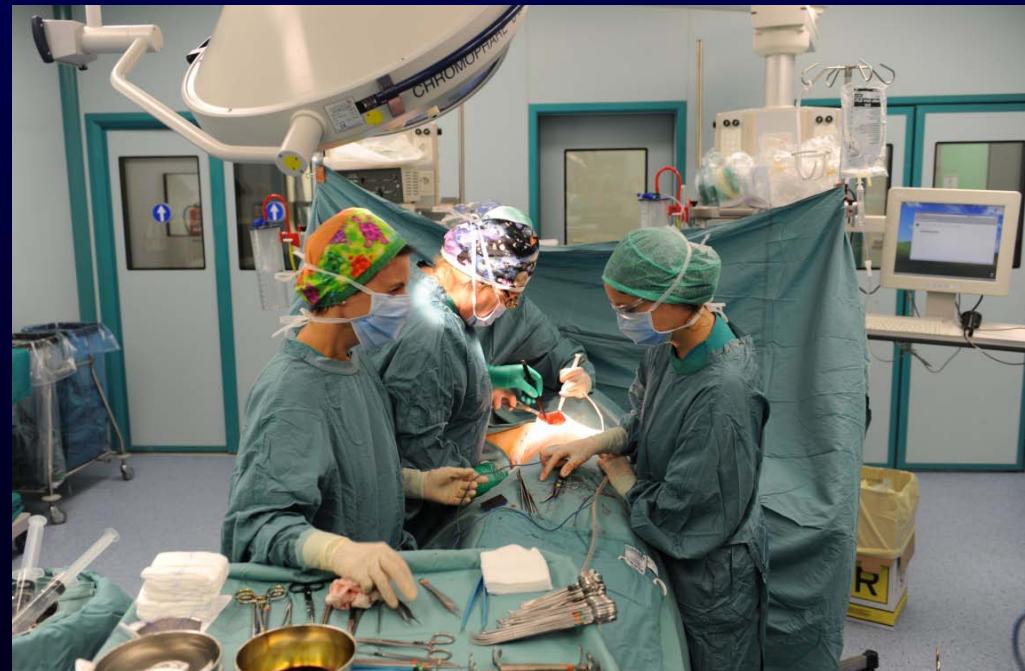


# LE ULTIME NOVITA' IN TERMINI DI CHIRURGIA

Al momento, **NON** esistono  
**tecniche radicalmente nuove**

ma

si opera sull'ottimizzazione dell'esistente in termini di  
**APPROCCI TERAPEUTICI e TECNICHE**



NOVITA'



# A LIVELLO MAMMARIO: APPROCCIO TERAPEUTICO

## PROSEGUE IL PROCESSO DI TAILORING CHIRURGICO-TERAPEUTICO



Ad esempio:

per una neoplasia di 2 cm

- chirurgia conservativa standard
- mastoplastica bilaterale
- mastectomia con ricostruzione immediata
- chemioterapia neoadiuvante



## PERSONALIZZAZIONE APPROCCIO DEMOLITIVO - RICOSTRUTTIVO

- Ottimizzazione tecniche di ricostruzione protesica
- Ottimizzazione tecniche di ricostruzione con lembi



# A LIVELLO MAMMARIO: TECNICHE

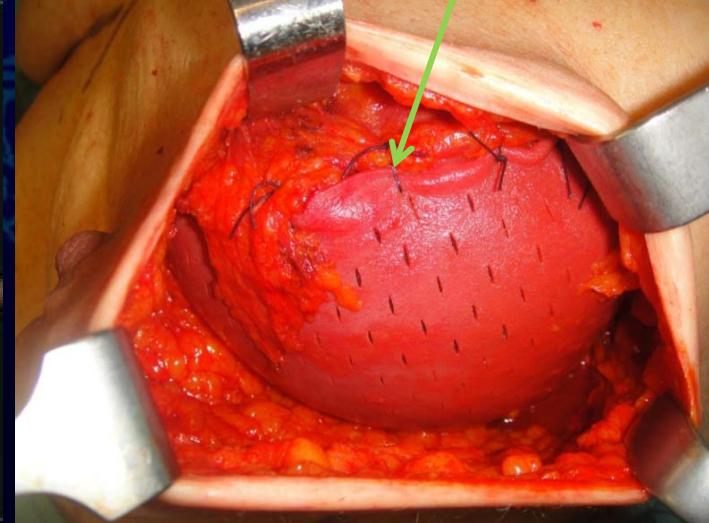
## PERSONALIZZAZIONE APPROCCIO DEMOLITIVO - RICOSTRUTTIVO

### RETE DI STABILIZZAZIONE: materiali

**SURGIMEND:** matrice acellulare di derma bovino, biocompatibile, da reidratare, fenestrato, provvede supporto per i fibroblasti che vi depongono nuovo collagene, costo elevato

**NOVITA'**

*Surgimend*



# A LIVELLO MAMMARIO: TECNICHE

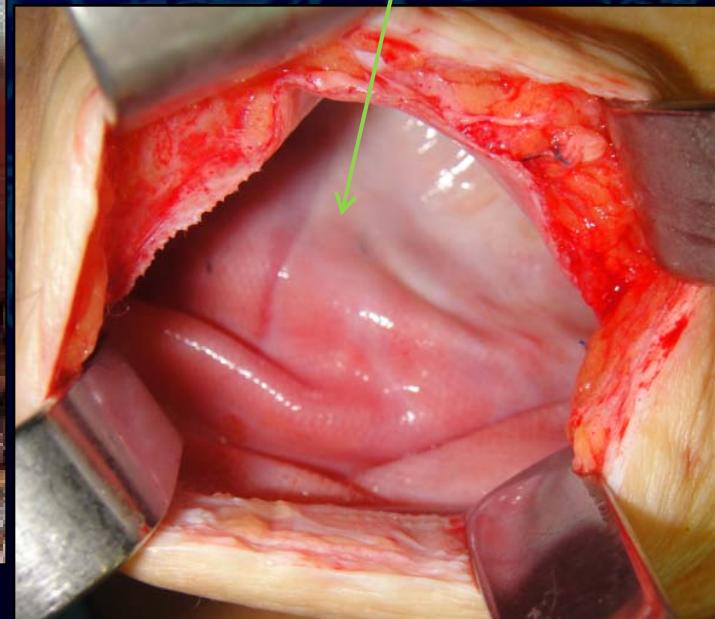
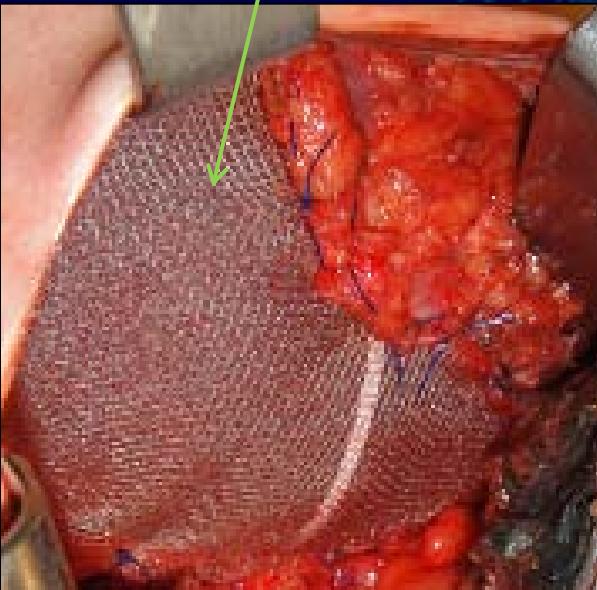
## PERSONALIZZAZIONE APPROCCIO DEMOLITIVO - RICOSTRUTTIVO

### RETE DI STABILIZZAZIONE: materiali

TYLOOP BRA: rete di polipropilene titanizzata, provvede supporto per i fibroblasti che vi depongono nuovo collagene, costo= §1/3 delle ADM

*Tyloop Bra*  
**NOVITA'**

*Integrazione del  
Tyloop Bra a un anno*



EVOLUZIONE DEL TRATTAMENTO CHIRURGICO DEI TUMORI DEL SENO

## EVOLUZIONE DELLA MASTECTOMIA



MASTECTOMIA NIPPLE SPARING

## PERFEZIONAMENTO DELL'IMPIEGO DEI LEMBI MICROCHIRURGICI

- Maggiore accuratezza dello studio preoperatorio
- Impiego PDE per lo studio della vitalità del lembo

NOVITA'



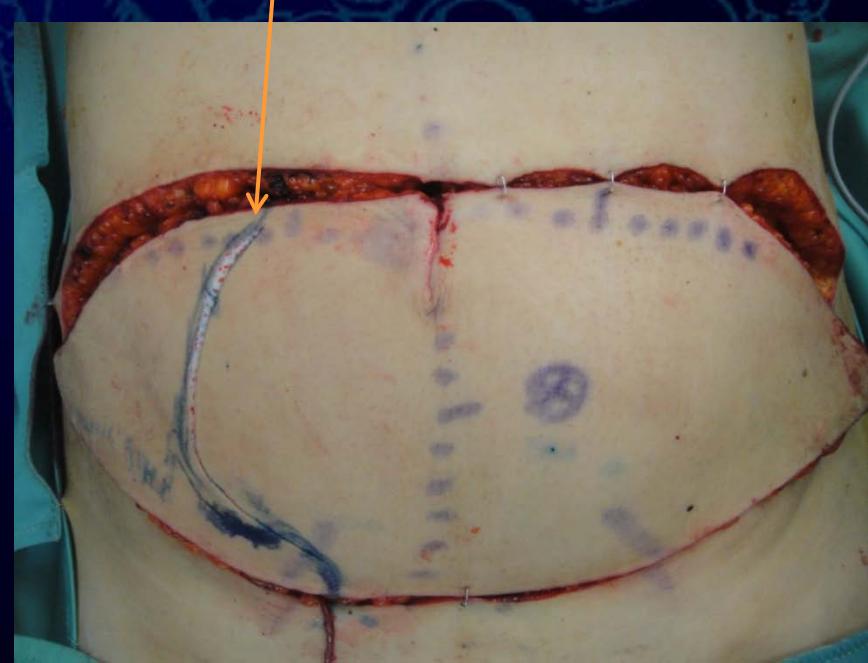
- Ottimizzazione tempi chirurgici e risultati estetici
- Aumento delle indicazioni nelle donne giovani in relazione al mantenimento nel tempo

# A LIVELLO MAMMARIO: TECNICHE

PDE

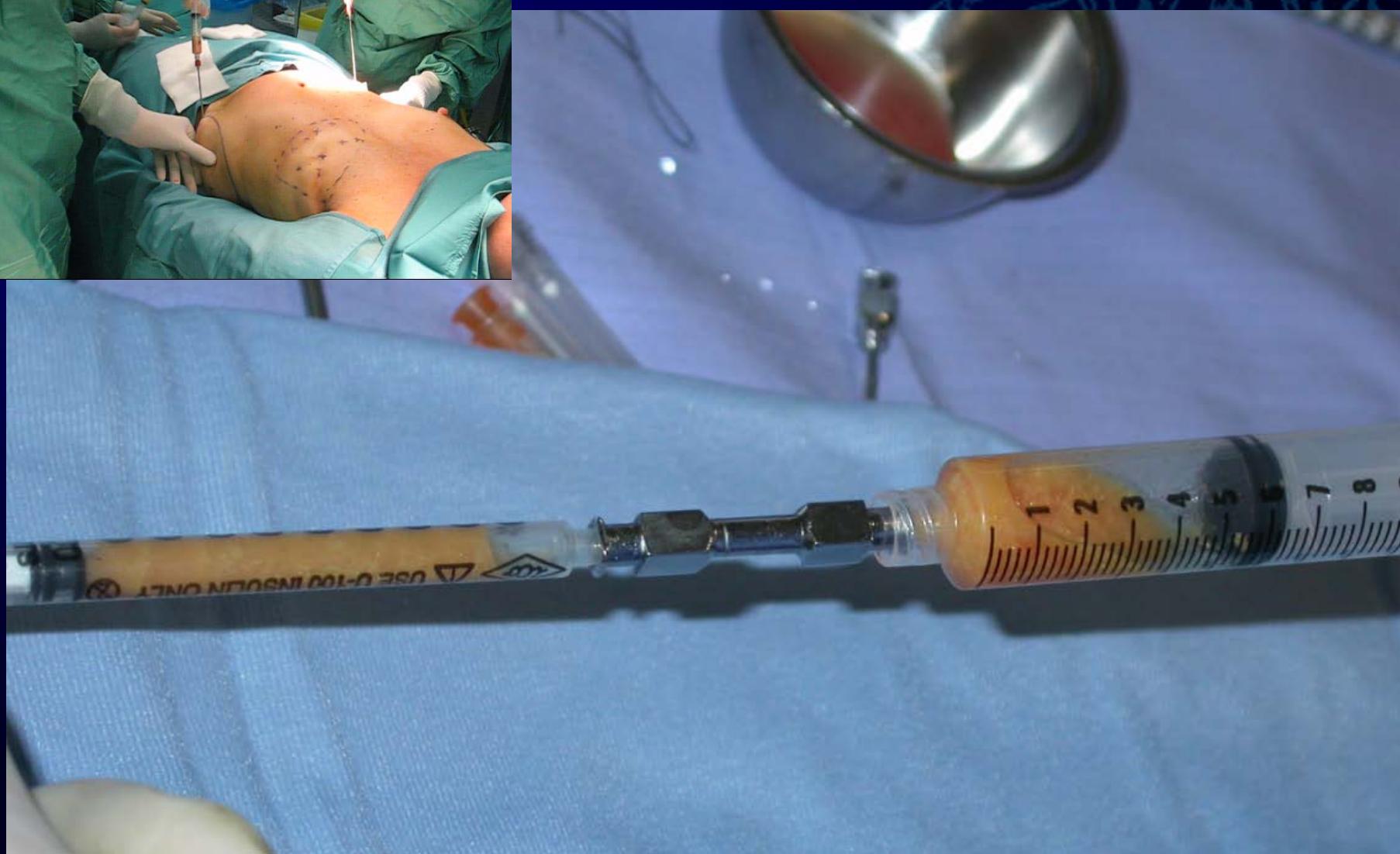
NOVITA'

Area del lembo  
non vascolarizzata



# A LIVELLO MAMMARIO: TECNICHE

## IMPIEGO DEL LIPOFILLING



# A LIVELLO MAMMARIO: TECNICHE

## IMPIEGO DEL LIPOFILLING

POST NSM+PROTESI

inserzione di 64 cc grasso

a dx e 54 cc a sn →



PRE NSM+R



POST NSM+R

NOVITA'

LIPOFILLING PER MIGLIORARE  
IL CONTORNO DELLE PROTESI



# A LIVELLO MAMMARIO: TECNICHE

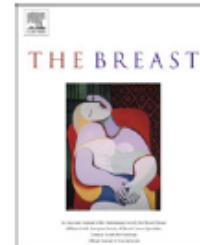
The Breast 20 (2011) 351–357



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The Breast

journal homepage: [www.elsevier.com/brst](http://www.elsevier.com/brst)



Original article

## Autologous fat transplantation in patients with breast cancer: “silencing” or “fueling” cancer recurrence?

Visnu Lohsiriwat<sup>a,c,\*</sup>, Giuseppe Curigliano<sup>b</sup>, Mario Rietjens<sup>a</sup>, Aron Goldhirsch<sup>b</sup>, Jean Yves Petit<sup>a</sup>

<sup>a</sup>Division of Reconstructive Surgery, European Institute of Oncology, Milan, Italy

<sup>b</sup>Department of Medicine, Division of Medical Oncology, European Institute of Oncology, Milan, Italy

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We provide direct and indirect effects of lipotransfer in breast cancer patients, highlighting pro and con related issues. To confirm the safety of lipotransfer in breast cancer patients we need clinical studies with control group based on long term follow up.

the main cosmetic result. Fat grafting can also be performed to improve the cosmetic results of the conservative treatment, particularly in case of defect resulting from the tumorectomy followed by the radiotherapy.<sup>1–7</sup> (Fig. 1). For several teams, lipofilling becomes part of the amanagement of the oncoplasticsurgery.<sup>6–23</sup> The indications of lipofilling include micromastia, tuberous breasts, Poland's Syndrome, post-lumpectomy deformity, post-mastectomy deformity, post radiotherapy sequelae, secondary reconstruction after flap or prosthesis reconstruction and nipple reconstruction.<sup>7,11,24</sup> However, the indication and case selection for lipotransplantation should be standardized base on large series studies and long term

recurrence due to the endocrine, paracrine and autocrine activity. In 2007, the French Society of Plastic Surgery addressed the question of cancer safety for the lipofilling technique in breast cancer patients. The Society sent a recommendation to the French plastic surgeons to postpone the lipofilling in the breast with or without breast cancer history unless it is performed under prospective controlled protocol. One year later, the American Society of Plastic Surgeons (ASPS) gathered 8 important American plastic surgeons in "The ASPS Fat Graft Task Force" to assess the indications, the safety and efficacy of autologous fat grafting.<sup>24</sup> Five major endpoints were identified: 1. What are the current and potential applications of fat grafting? 2. What risks and complications are associated with fat grafting? 3. How does technique affect outcomes of fat grafting? 4. What risk factors need to be considered for patient selection? 5. What advancements in bench research/molecular biology should potentially impact current or future methods of fat grafting?



NOVITA'

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E-mail address: [lohsiriwat@gmail.com](mailto:lohsiriwat@gmail.com) (V. Lohsiriwat).

## NOVITA' LIPOFILLING: DISCUSSIONE



### The Breast

Volume 22, Issue 1, February 2013, Pages 96–97



Viewpoints and debate

#### Short commentaries on data published by Petit et al. on locoregional risk after lipofilling in breast cancer patients

Lea Regolo<sup>a</sup>, Licia Galli<sup>b</sup>,  , Gianfranco Petrolo<sup>a</sup>, Elisabetta Scoccia<sup>a</sup>, Alessia De Simone<sup>a</sup>, Susanna Fissi<sup>a</sup>, Alberto Zambelli<sup>a</sup>, Angela Amato<sup>a</sup>, Vittorio Zanini<sup>a</sup>

<sup>a</sup> Division of Breast Surgery, Salvatore Maugeri Foundation, Pavia, Italy

<sup>b</sup> Department of Obstetrics and Gynaecology, University of Eastern Piedmont, Novara, Italy

# A LIVELLO MAMMARIO: TECNICHE LIPOFILLING: DISCUSSIONE

Annals of Oncology

original articles

Annals of Oncology 24: 1479–1484, 2013  
doi:10.1093/annonc/mds660  
Published online 7 February 2013

## Evaluation of fat grafting safety in patients with intraepithelial neoplasia: a matched-cohort study

J. Y. Petit<sup>1\*</sup>, M. Rietjens<sup>1</sup>, E. Botteri<sup>2</sup>, N. Rotmensz<sup>2</sup>, F. Bertolini<sup>3</sup>, G. Curigliano<sup>4</sup>, P. Rey<sup>1</sup>, C. Garusi<sup>1</sup>, F. De Lorenzi<sup>1</sup>, S. Martella<sup>1</sup>, A. Mancconi<sup>1</sup>, B. Barbieri<sup>1</sup>, P. Veronesi<sup>5</sup>, M. Intra<sup>5</sup>, T. Brambollo<sup>1</sup>, A. Gottardi<sup>1</sup>, M. Sommariva<sup>1</sup>, G. Longo<sup>1</sup>, M. Iera<sup>1</sup>, V. Giovinazzo<sup>1</sup> & V. Lohsiriwat<sup>1,6</sup>

<sup>1</sup>Department of Reconstructive Surgery; <sup>2</sup>Division of Epidemiology and Biostatistics; <sup>3</sup>Laboratory of Hematology–Oncology; <sup>4</sup>Division of Medical Oncology; <sup>5</sup>Department of Breast Surgery, European Institute of Oncology, Milan, Italy; <sup>6</sup>Department of Surgery, Faculty of Medicine, Mahidol University, Bangkok, Thailand

Received 26 September 2012; revised 26 November 2012; accepted 7 December 2012

While numerous published clinical studies have highlighted the strong interest in this procedure for plastic surgery, no systematic review has been performed on the role of

**Conclusion:** Higher risk of LFS was observed in intraepithelial neoplasia patients following lipofilling. Although further studies are required to validate our conclusions, patients belonging to this subgroup should be informed of these results and the potential risks.

events (%) in the group who had undergone lipofilling. Though, because of the small sample size in this subgroup, no

diagnostic bilateral or recurrent tumour, and previous breast cancer or breast cancer associated with another cancer were excluded. A total of 59 patients were finally included in the current study, among these 57 DIN and 2 LIN patients (Table 1).

All the 59 patients had undergone lipofilling according to the protocol of the Coleman technique, with no additional cell enhancement. The fat

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# MODERNO APPROCCIO CHIRURGICO

ONE SIZE FITS ALL?

NO !!!



A. Aydiner

13<sup>th</sup> St. Gallen IBCC, 2013

consensus

## Surgery of the primary breast cancer

- Skin nipple sparing mastectomy is an acceptable treatment without RT.
- Skin nipple sparing mastectomy is an acceptable treatment in only if margin toward nipple is tumor free and immediate reconstruction planned.
- MRI should not be routine for patients with newly diagnosed disease (to assess decision on breast conserving surgery).
- In woman undergoing breast conserving surgery the minimum appropriate surgical margin is: "no ink on invasive tumor".

## A LIVELLO MAMMARIO: TECNICA



Studio intraoperatorio, in loco ,  
dei margini

**Electro-magnetic Margin Probe  
INVESTIGATIONAL**



Dune Medical Devices, Inc

Dune Medical Devices, Inc

# A LIVELLO MAMMARIO: APPROCCIO TERAPEUTICO

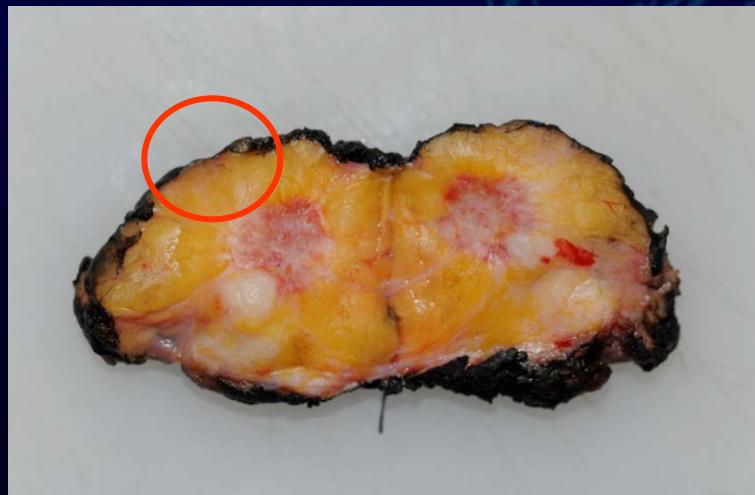
Dal congresso di St. Gallen, 2013

Probabile cambiamento nell'approccio sulla valutazione  
dell'INDENNITA' DEI MARGINI



Margine libero = non transected

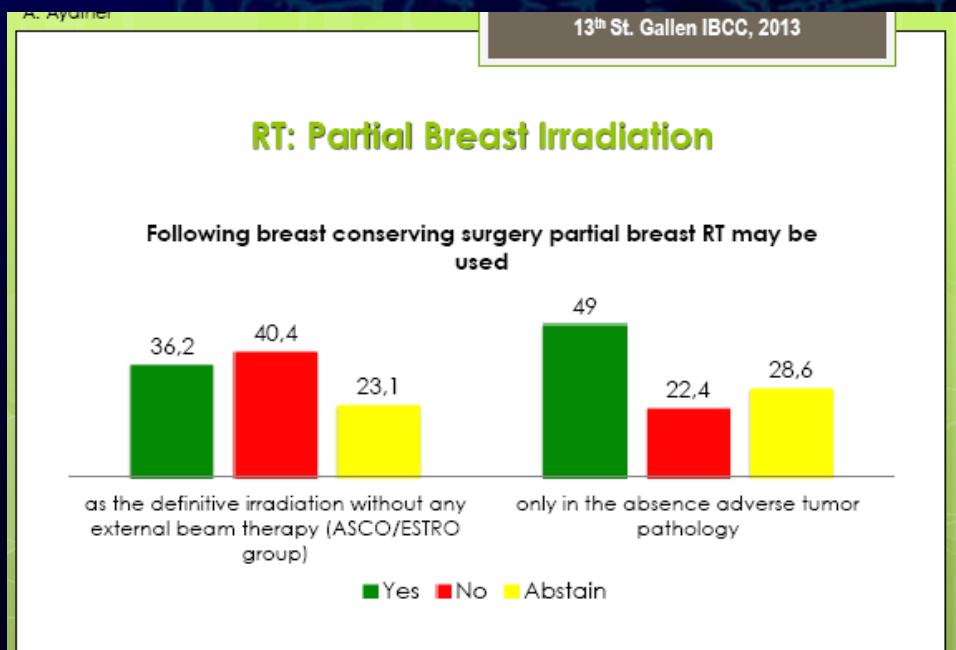
Se non vi sono cellule tumorali **sul margine**, non si prende più in considerazione la distanza minima alla quale si trovano



## OLTRE LA CHIRURGIA...

### Partial Breast Irradiation (IORT e non solo...)

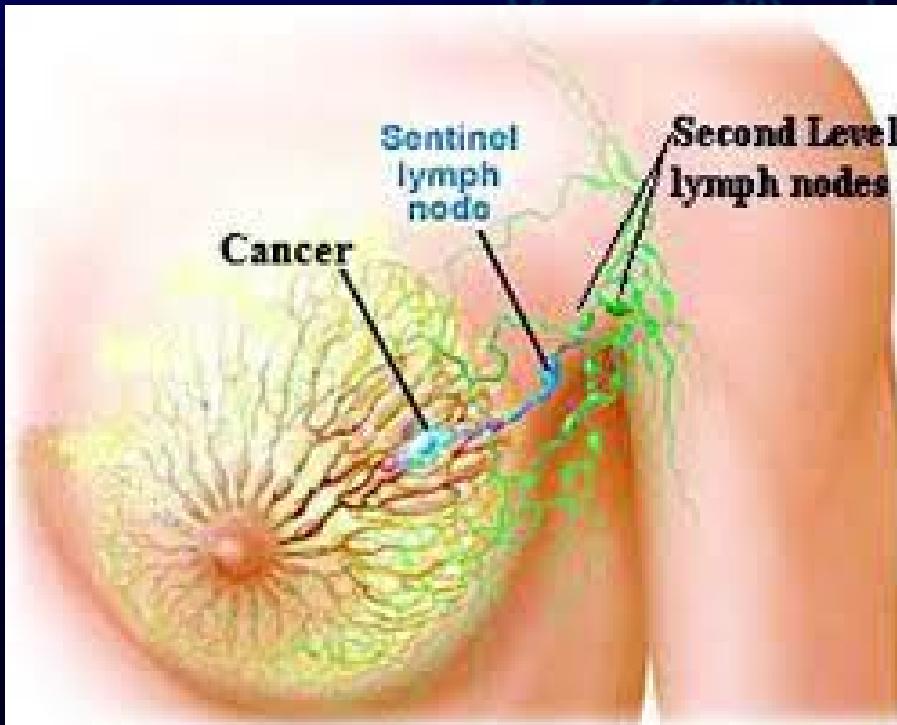
**NOVITA'** → Messa a punto delle indicazioni



LE ULTIME NOVITA' IN TERMINI DI CHIRURGIA

# A LIVELLO ASCELLARE NOVITA'

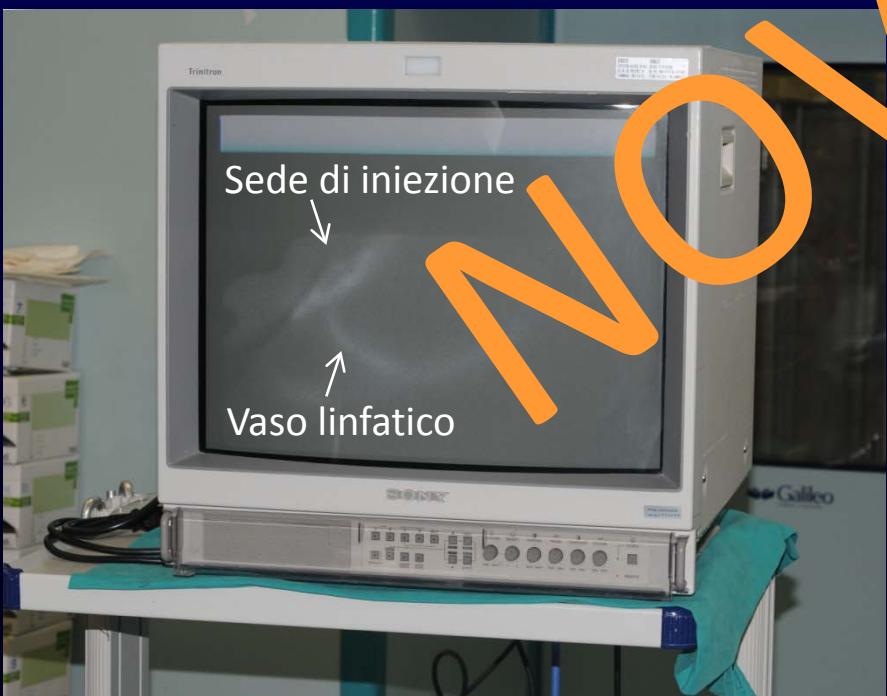
in termini di tecnica e di  
approccio globale



# A LIVELLO ASCELLARE: TECNICA del LINFONODO SENTINELLA

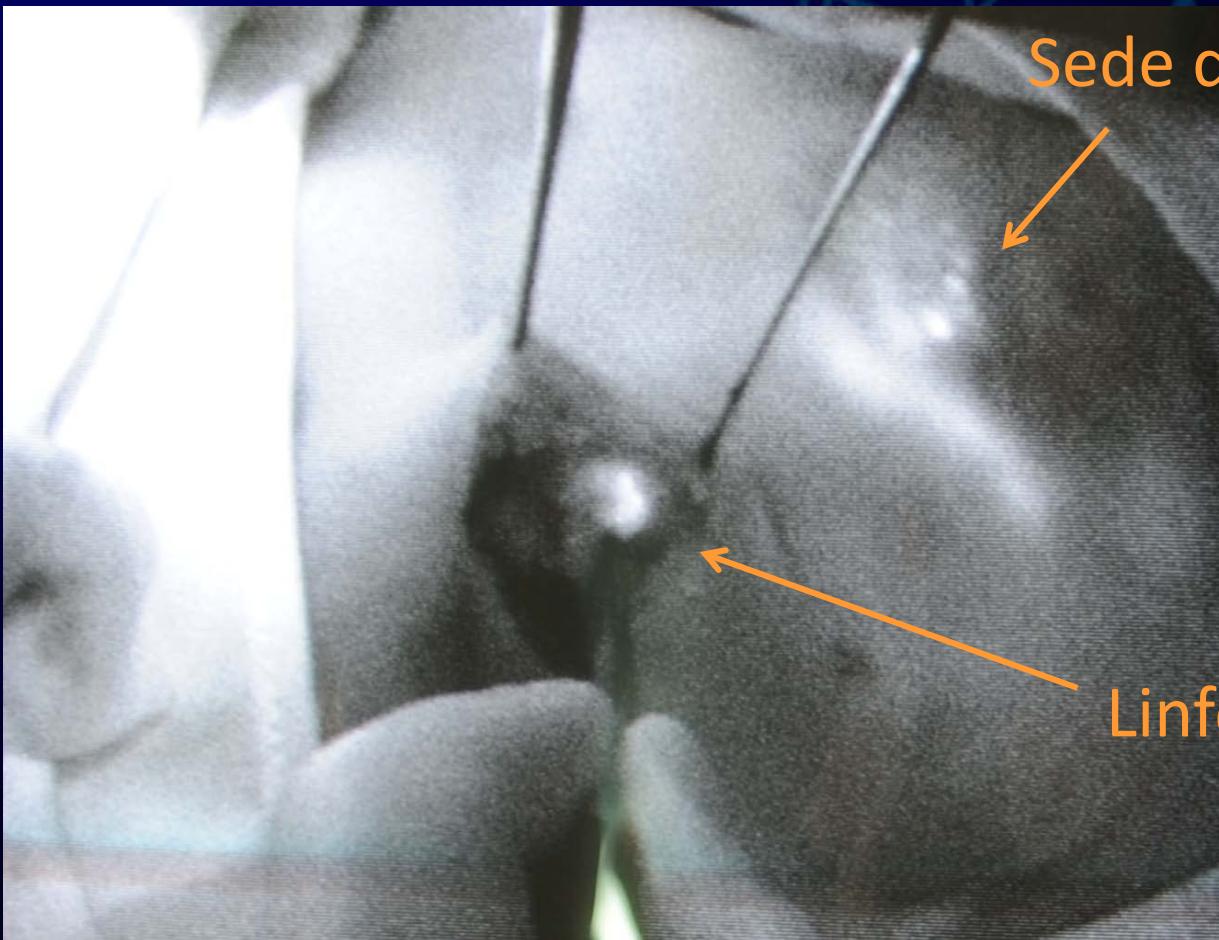
Tecnica con iniezione di colorante fluorescente

Verde indocianina: aumento del tasso di identificazione al 99-100%



# A LIVELLO ASCELLARE: TECNICA del LINFONODO SENTINELLA

Colorante fluorescente: verde indocianina



# Positive sentinel node: what to do today

## To Dissect or Not to Dissect

When  
Who  
Why



Does knowledge of node positivity affect management

Does removing these extra foci of cancer improve survival or risk of recurrence



## Sentinel node biopsy for breast cancer: past, present, and future

Kazuyoshi Motomura

Received: 19 September 2012/Accepted: 15 October 2012  
© The Japanese Breast Cancer Society 2012

**Abstract** Sentinel node biopsy has replaced axillary lymph node dissection as the standard of care in early breast cancers. Sentinel node biopsy represents a highly accurate and less-morbid axillary staging, which allows most patients to avoid unnecessary axillary lymph node dissection and its morbidity. This review provides information including several issues which are still under debate, such as clinical significance of micrometastases, avoidance of axillary lymph node dissection for patients with positive sentinel nodes, accuracy and timing of sentinel node biopsy in patients undergoing neoadjuvant chemotherapy, and how many sentinel nodes are sufficient for removal. Finally, a new topic is introduced: superparamagnetic iron oxide (SPIO)-enhanced magnetic resonance (MR) imaging for the detection of metastases in sentinel nodes localized by computed tomography (CT)-lymphography (CT-LG) in patients with breast cancer. SPIO-enhanced MR imaging is a useful method of detecting metastases in sentinel nodes localized by CT-LG in patients with breast cancer. Patients with clinically negative nodes may be spared even sentinel node biopsy when the sentinel node is diagnosed as disease free using SPIO-enhanced MR imaging.

**Keywords** Sentinel node · Sentinel node biopsy · Axillary lymph node dissection · Breast cancer · Staging

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Published online: 19 December 2012

### Introduction

Sentinel node biopsy has rapidly emerged as invasive, highly accurate method of axillary staging as an alternative to axillary lymph node dissection as standard of care in breast cancer. The concept of sentinel node was first introduced by Morton and colleagues [1] for the treatment of early cutaneous melanoma [1]. The sentinel node is the lymph node draining the primary tumor and the node most likely to contain metastatic disease. The technique for breast cancer was first validated and demonstrated by Giuliano et al. and Krag et al. Giuliano et al. [2] reported the results of sentinel node biopsy using isosulfan blue alone. Sentinel nodes were identified in 114 (90 %) of patients and precisely predicted the status of the axillary nodes in 96 % of patients. In their study, Giuliano et al. identified [3] sentinel nodes in 107 patients, with 100 % accuracy for predicting nodal status. Krag et al. [4] were able to identify nodes in 18 (82 %) of 22 patients using a radioactive gamma probe. Motomura et al. [5] reported the sentinel node biopsy using indocyanine green (ICG) alone. The identification rate and false-negative rate of ICG-alone technique in 172 patients with breast cancer were 74 and 11 %, respectively. Furthermore, Motomura et al. [6] demonstrated that the combination of ICG and radioisotopes is superior to dye alone for sentinel node biopsy. The initial 93 patients had sentinel node biopsy guided by dye and radioisotopes. The next 138 patients had sentinel node biopsy guided by dye and radioisotopes. Nodes could be identified in 95 % of 138 patients using the combination of ICG and radioisotopes, but in only 84 % of 93 patients using ICG alone. The sensitivity, specificity, and overall accuracy of the combination method in the prediction of axillary lymph node status were 100, 100, and 100 %,

## Critical issues

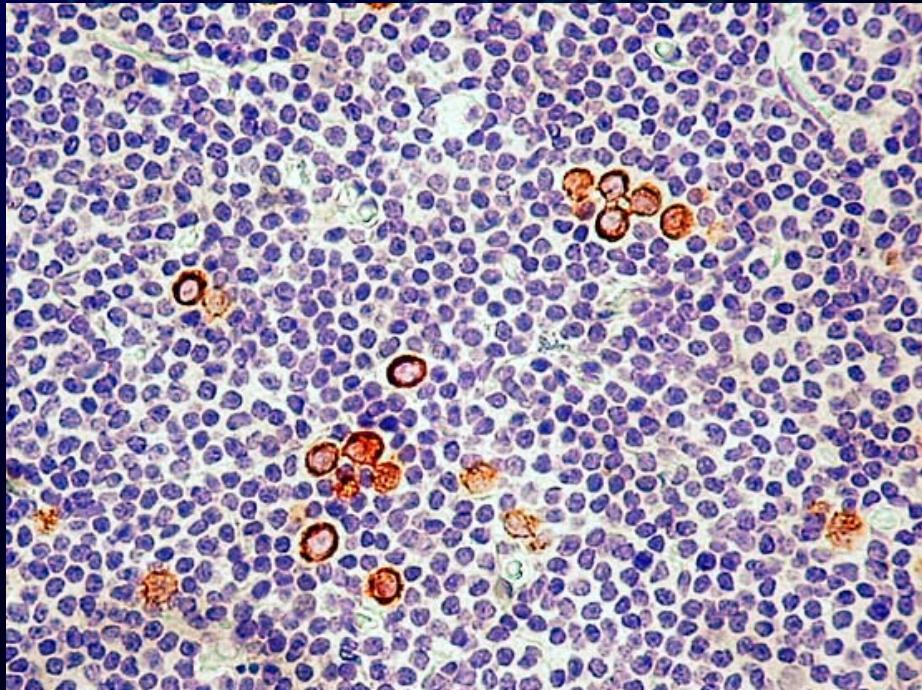
1. Clinical significance of micrometastases in sentinel nodes
2. Avoidance of axillary lymph node dissection in patients with positive sentinel nodes
3. Neoadjuvant chemotherapy and sentinel node biopsy
4. How many sentinel nodes are enough?



Approccio in presenza di **LFN SENTINELLA POSITIVO**

Micrometastasi

No linfoadenectomia ascellare



# IL LINFONODO SENTINELLA DOPO ST GALLEN 2013

## SN MICROMETASTATICO

Articles

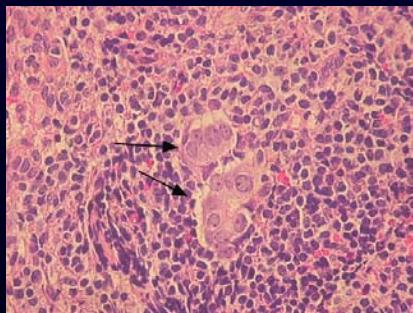
*Lancet Oncol* 2013; 14: 297–305

# NOVITA'



Axillary dissection versus no axillary dissection in patients with sentinel-node micrometastases (IBCSG 23-01):  
a phase 3 randomised controlled trial

Viviana Galimberti, Bernard F Cole, Stefano Zurruda, Giuseppe Viale, Alberto Luini, Paolo Veronesi, Paola Baratella, Camelia Chifu,  
Manuela Sargentì, Mattia Intra, Oreste Gentilini, Mauro G Mastropasqua, Giovanni Mazzarol, Samuele Massarut, Jean-Rémi Garbay,  
Janez Zgajnar, Hanne Galatius, Angelo Recalcati, David Littlejohn, Monika Bamert, Marco Colleoni, Karen N Price, Meredith M Regan,  
Aron Goldhirsch, Alan S Coates, Richard D Gelber, Umberto Veronesi, for the International Breast Cancer Study Group Trial 23-01 investigators



# A LIVELLO ASCELLARE: APPROCCIO del LINF SENTINELLA

## IBCSG 23-01

Apr 2001 – Feb 2010

T≤5 cm cN0  
BCS or MASTECTOMY

SNB

MICROMETASTASES  
931 PTS

R

FOLLOW UP  
467 pts

AXILLARY  
DISSECT V. Ozmen  
464



13<sup>th</sup> St. Gallen IBCC, 2013

## IBCSG 23-01 trial

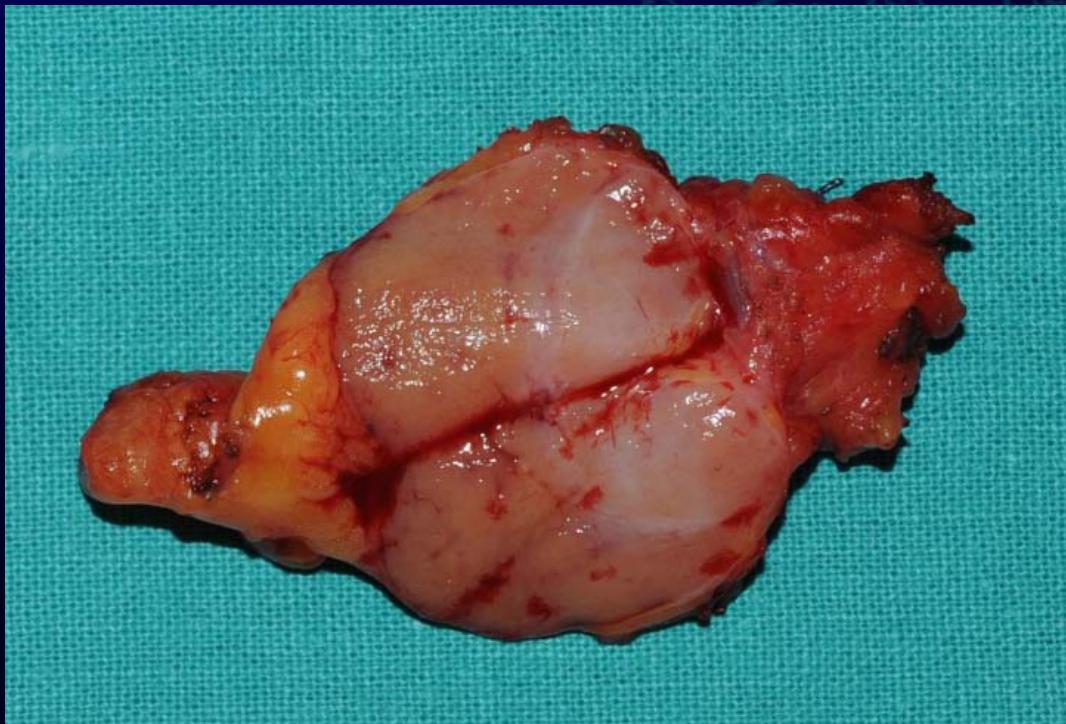
- “Not giving AD to patients with 1 or more SN micrometastases has no adverse influence on DFS or OS”
- This is level 1 evidence in favour of the St Gallen 2011 recommendation that axillary dissection should not be performed if the sentinel node contains only micrometa

# APPROCCIO A LIVELLO ASCELLARE: LINFONODO SENTINELLA

Approccio in presenza di **LFN SENTINELLA POSITIVO**

Macrometastasi

???



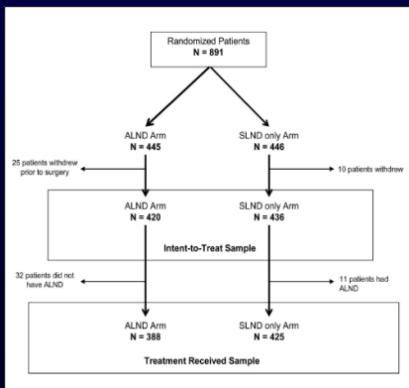
# Positive sentinel node: what to do today

ACOSOG Z0011

## Axillary Dissection vs No Axillary Dissection in Women With Invasive Breast Cancer and Sentinel Node Metastasis

A Randomized Clinical Trial

**Design, Setting, and Patients** The American College of Surgeons Oncology Group Z0011 trial, a phase 3 noninferiority trial conducted at 115 sites and enrolling patients from May 1999 to December 2004. Patients were women with clinical T1-T2 invasive breast cancer, no palpable adenopathy, and 1 to 2 SLNs containing metastases identified by frozen section, touch preparation, or hematoxylin-eosin staining on permanent section. Targeted enrollment was 1900 women with final analysis after 500 deaths, but the trial closed early because mortality rate was lower than expected.



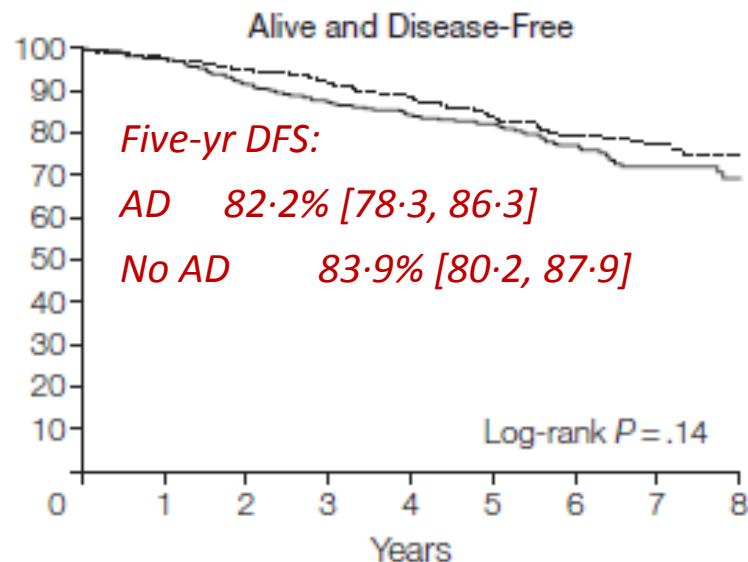
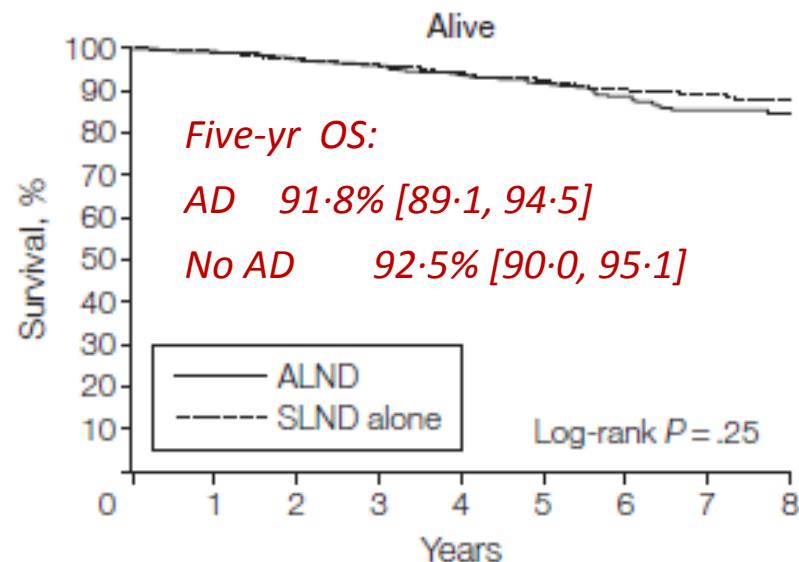
Monica Morrow, MD  
A

**Interventions** All patients underwent lumpectomy and tangential whole-breast irradiation. Those with SLN metastases identified by SLND were randomized to undergo ALND or no further axillary treatment. Those randomized to ALND underwent dissection of 10 or more nodes. Systemic therapy was at the discretion of the treating physician.

**Results** Clinical and tumor characteristics were similar between 445 patients randomized to ALND and 446 randomized to SLND alone. However, the median number of nodes removed was 17 with ALND and 2 with SLND alone. At a median follow-up of 6.3 years (last follow-up, March 4, 2010), 5-year overall survival was 91.8% (95% confidence interval [CI], 89.1%-94.5%) with ALND and 92.5% (95% CI, 90.0%-95.1%) with SLND alone; 5-year disease-free survival was 82.2% (95% CI, 78.3%-86.3%) with ALND and 83.9% (95% CI, 80.2%-87.9%) with SLND alone. The hazard ratio for treatment-related overall survival was 0.79 (90% CI, 0.56-1.11) without adjustment and 0.87 (90% CI, 0.62-1.23) after adjusting for age and adjuvant therapy.

# OS and DFS in trial Z0011

Survival of the ALND Group compared with SLND-Alone Group



ALND indicates axillary lymph node dissection; SLND, sentinel lymph node dissection.

# Z0011 conclusion

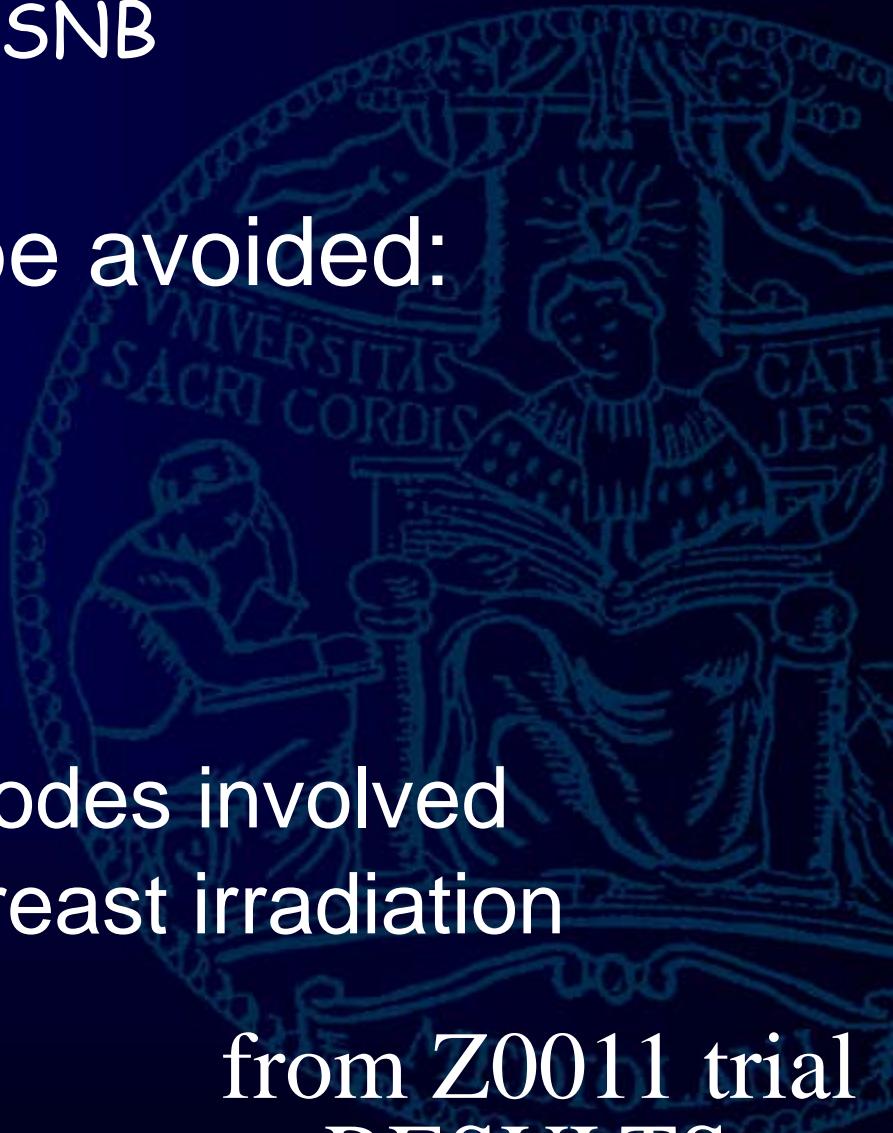
“it is time to abandon AD in early BC pts with a positive SN provided they receive systemic adjuvant treatment and whole breast RT”

# Positive sentinel node: what to do today

## Positive SNB

ALND could be avoided:

- 1.cT1/2, cN0, G1-2
- 2.Hormone sensitivity
- 3.Older than 60 years
- 4.Less than 3 sentinel nodes involved
- 5.BCS plus tangential breast irradiation



from Z0011 trial  
RESULTS

# Positive sentinel node: what to do today

## Positive SNB

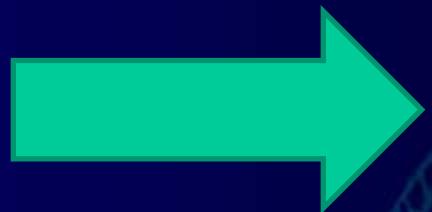
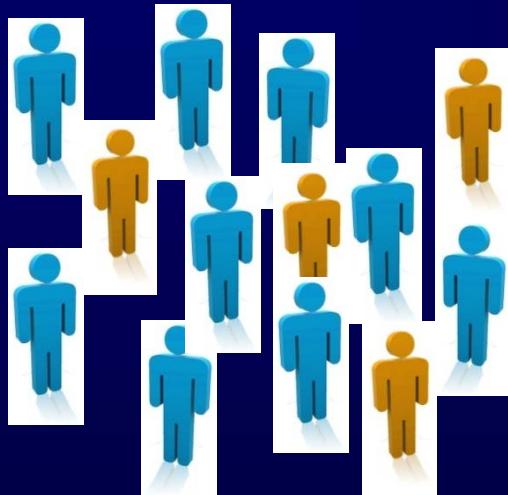
ALND is needed:

1. Clinically Nodes Positive
2. Neoadjuvant Chemotherapy
3. More than 3 sentinel nodes involved
4. No BCS + tangential breast irradiation
5. No adjuvant therapies

from Z0011 trial  
RESULTS

# OSSERVAZIONI SU ACOSOG Z011

Totale pazienti SN+



Pazienti SN+ selezionati



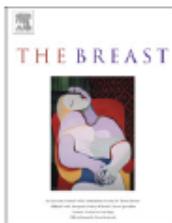
SELEZIONE FAVOREVOLE  
Nomogramma  
MSKCC



~22% probabilità di avere altri linfonodi interessati

96% trattamento sistemico

- T1 = 67-70%
- ER+ = ~ 82%
- >50y = 62-67%
- Grading = soprattutto G2
- LVI = assente



Review

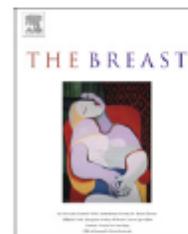
## Which sentinel lymph-node (SLN) positive breast cancer patient needs an axillary lymph-node dissection (ALND) – ACOSOG Z0011 results and beyond

Wolfgang Gatzemeier<sup>a,\*</sup>, G. Bruce Mann<sup>b</sup>

<sup>a</sup>Humanitas Clinical Institute, Breast Unit, Via Manzoni 56, Milan, Italy

<sup>b</sup>The Breast Service, The Royal Melbourne and Royal Women's Hospital, Victoria, Australia

The presentation and publication of the ACOSOG Z11 study has posed challenges to those treating breast cancers and to patients with the disease. The suggestion that there is no oncological benefit to the ALND in the presumed 28% of patients in the no-dissection arm of the study who had residual disease was counter-intuitive to most, and has challenged many entrenched beliefs about the disease and its treatment. While many major institutions, especially in the USA, have significantly changed their practice for patients meeting the inclusion criteria of the study, clinicians in many parts of the world have not embraced these findings and interpretations.



Review

Which sentinel lymph-node (SLN) positive breast cancer patient needs an axillary lymph-node dissection (ALND) – ACOSOG Z0011 results and beyond

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We are not yet able to accurately define the groups who do. These decisions may not be able to be made in isolation from other practice patterns.

If adjuvant systemic therapy is used more selectively, or if radiation therapy is tailored to the disease, the implication of leaving axillary disease undissected may vary.

The results of the ACOSOG Z0011 trial are impressive and informative for the axillary management of patients with a positive SN, a low risk of nonSN involvement who will receive adjuvant systemic therapy and WBI.

They are provocative but by no means conclusive for patients with a higher risk of nonSN involvement would have been eligible, but not informative for those not treated in this manner.

It would be unwise to conclude that regional recurrences will not occur, or that they do not matter, without substantially more evidence than is currently available.

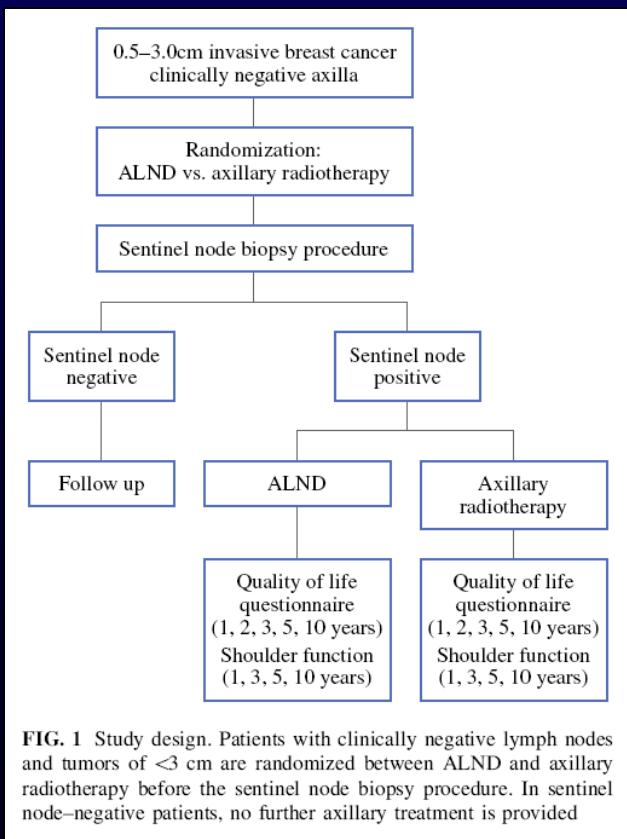
# Positive sentinel node: what to do today



## AMAROS TRIAL

### After Mapping of the Axilla: Radiotherapy Or Surgery

Phase III Randomized Study of Complete Axillary Lymph Node Dissection Versus Axillary Radiotherapy in Sentinel Lymph Node-Positive Women With Operable Invasive Breast Cancer



Ann Surg Oncol (2010) 17:1854–1861  
DOI 10.1245/s10434-010-0945-z

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ORIGINAL ARTICLE – BREAST ONCOLOGY

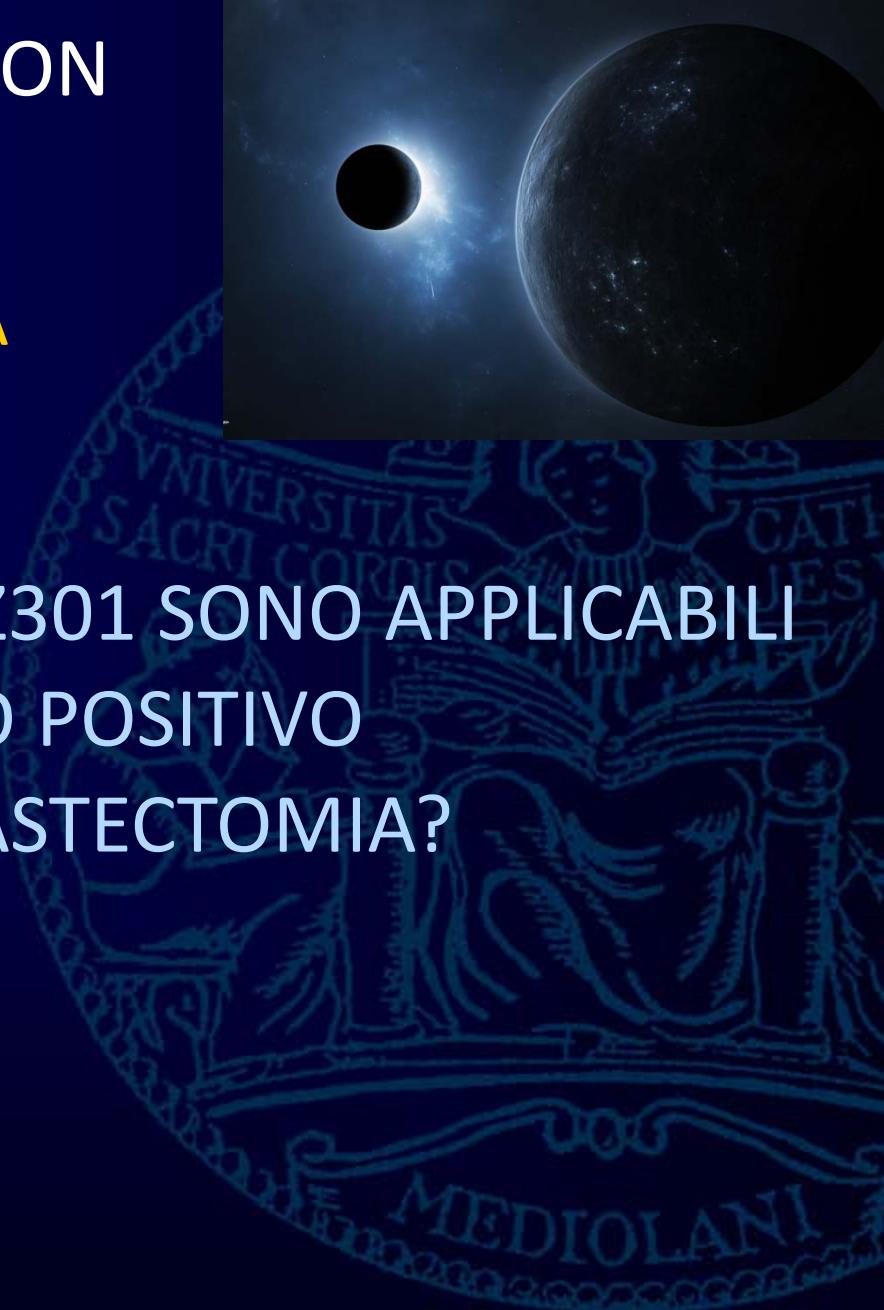
#### Sentinel Node Identification Rate and Nodal Involvement in the EORTC 10981-22023 AMAROS Trial

Marieke E. Straver, MD, PhD<sup>1</sup>, Philip Meijnen, MD, PhD<sup>2</sup>, Geertjan van Tienhoven, MD, PhD<sup>3</sup>, Cornelis J. H. van de Velde, MD, PhD<sup>4</sup>, Robert E. Mansel, MD, PhD<sup>5</sup>, Jan Bogaerts, PhD<sup>6</sup>, Nicole Duez<sup>6</sup>, Luigi Cataliotti, MD, PhD<sup>7</sup>, Jean H. G. Klinkenbijl, MD, PhD<sup>8</sup>, Helen A. Westenberg, MD, PhD<sup>9</sup>, Huub van der Mijle, MD, PhD<sup>10</sup>, Marko Snoj, MD, PhD<sup>11</sup>, Coen Hurkmans, PhD<sup>12</sup>, and Emiel J. T. Rutgers, MD, PhD<sup>1</sup>

# THE DARK SIDE OF THE MOON

- SN + POST MASTECTOMIA

I RISULTATI DELLO STUDIO Z301 SONO APPLICABILI  
AL LINFONODO POSITIVO  
ANCHE DOPO MASTECTOMIA?



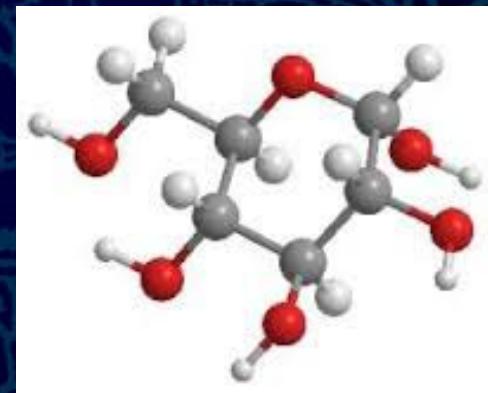
# LE ULTIME NOVITA' IN TERMINI DI CHIRURGIA

## ROVESIO DELLA MEDAGLIA IN RELAZIONE ALLA **NOVITA'** RISCHIO DELLA SITUAZIONE ATTUALE

nella presunzione di  
**UNDERTREATMENT CHIRURGICO**



OVERTREATMENT DA PARTE  
DEGLI ALTRI TERAPEUTI



**OVVERO**

RT su ascella ?????

Aumento indicazioni chemio ????

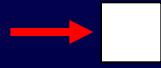


# THE DARK SIDE OF THE MOON

- SN + POST NAD



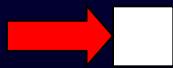
Controindicato sempre



Indicato pre NAD



Indicato post NAD sempre



Indicato post NAD solo se cN0



Indicato post NAD solo se cN0 post NAD



**Sentinel-lymph-node biopsy in patients with breast cancer before and after neoadjuvant chemotherapy (SENTINA): a prospective, multicentre cohort study**



Thorsten Kuehr, Ingo Bauerfeind, Tanja Fehm, Barbara Fleige, Mairi Hausschild, Gisela Helm, Annetje Leheus, Cornelia Liedtke, Gunter von Minckwitz, Valentina Nedjalkova, Sabine Schmidloch, Peter Schreiter, Annette Staehler, Michael Ulrich

**The primary endpoint:** accuracy (false-negative rate) of sentinel-lymph-node biopsy after neoadjuvant chemotherapy

for patients who converted from cN1 to ycN0 disease during neoadjuvant chemotherapy (arm C).

Sentinel-lymphnode biopsy provides less reliable results if it is undertaken after neoadjuvant chemotherapy in patients who convert from a positive to a negative axillary status,

compared with women who undergo sentinel-lymphnode biopsy in primary surgery (panel).

In patients who converted after neoadjuvant chemotherapy from cN+ to ycN0 (arm C), the detection rate was 80·1%

(95% CI 76·6–83·2; 474 of 592) and false-negative rate was 14·2%

**Secondary endpoints:** comparison of the detection rate of sentinel-lymph-node biopsy before and after neoadjuvant chemotherapy, and also the false-negative rate and detection rate of sentinel-lymph-node biopsy after removal of the sentinel lymph node.

**Sentinel-lymph-node biopsy is a reliable diagnostic method before neoadjuvant chemotherapy. After**

**systemic treatment or early sentinel-lymph-node biopsy, the procedure has a lower detection rate and a higher false negative rate compared with sentinel-lymph-node biopsy done before neoadjuvant chemotherapy.**

In our study, a second sentinel-lymph-node biopsy procedure after neoadjuvant chemotherapy in women with a positive sentinel node before systemic treatment

resulted in **the detection rate 60·8%** and a false-negative rate of 51· 6%, indicating that this procedure is not a useful option.



## Review

**Timing of the sentinel lymph node biopsy in breast cancer patients receiving neoadjuvant therapy — Recommendations for clinical guidance**

Duveken B.Y. Fontein, Willemien van de Water, J. Sven D. Mieog, Gerrit-Jan Liefers,  
Cornelis J.H. van de Velde\*

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Accepted 1 February 2013

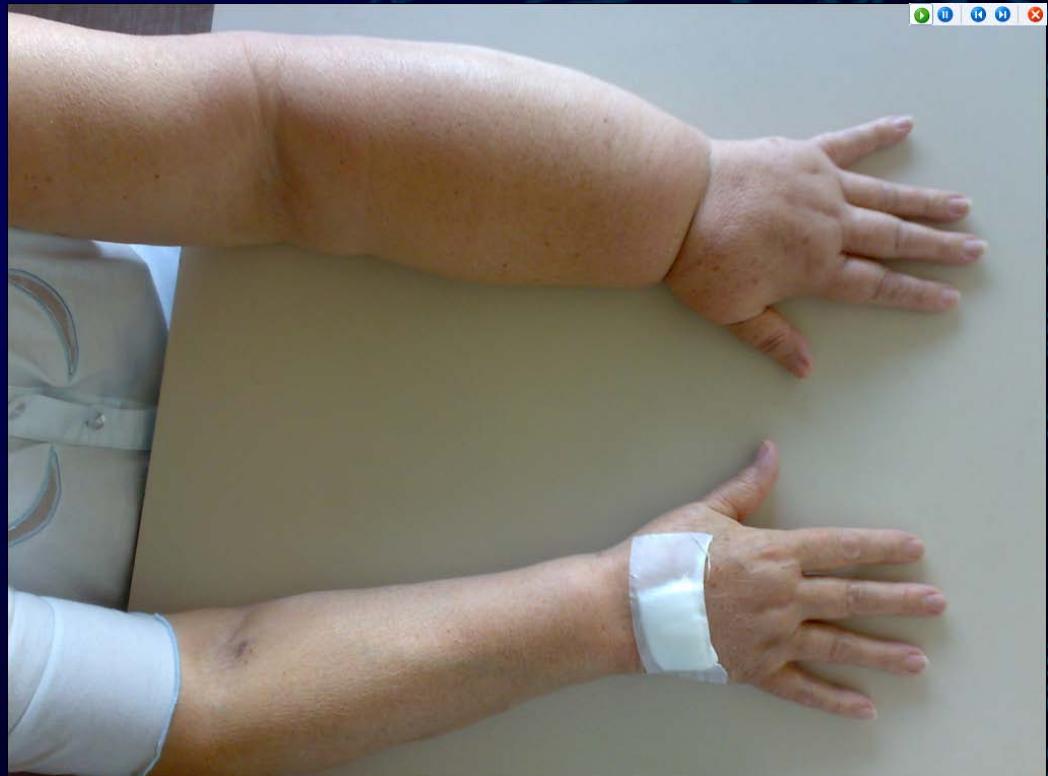
Available online 6 March 2013

On the basis of our findings, we recommend that the SLNB can be performed **after** NAC in all cases. In patients with a clinically node-negative (cN0) status prior to NAC, the SLNB should be performed after NAC, and in case of a histologically confirmed negative SLNB, a completion axillary lymph node dissection (ALND) has no added value and can be omitted. In patients with clinically positive nodal involvement (cN $\oplus$ ) prior to NAC, all axillary surgery can also be performed after NAC.

**Axillary downstaging**  
One of the major advantages of axillary surgery after neoadjuvant therapy is the potential for less extensive surgery as well as reducing surgery to a single procedure. Overall, 20-44% of node-positive patients achieves a complete pathological response in the axilla with NAC and may thereby be spared an ALND, with its well-known comorbidities. Moreover, patients who are clinically nodenegative before NAC may also be spared a second surgical procedure when the SLNB is performed after NAC.

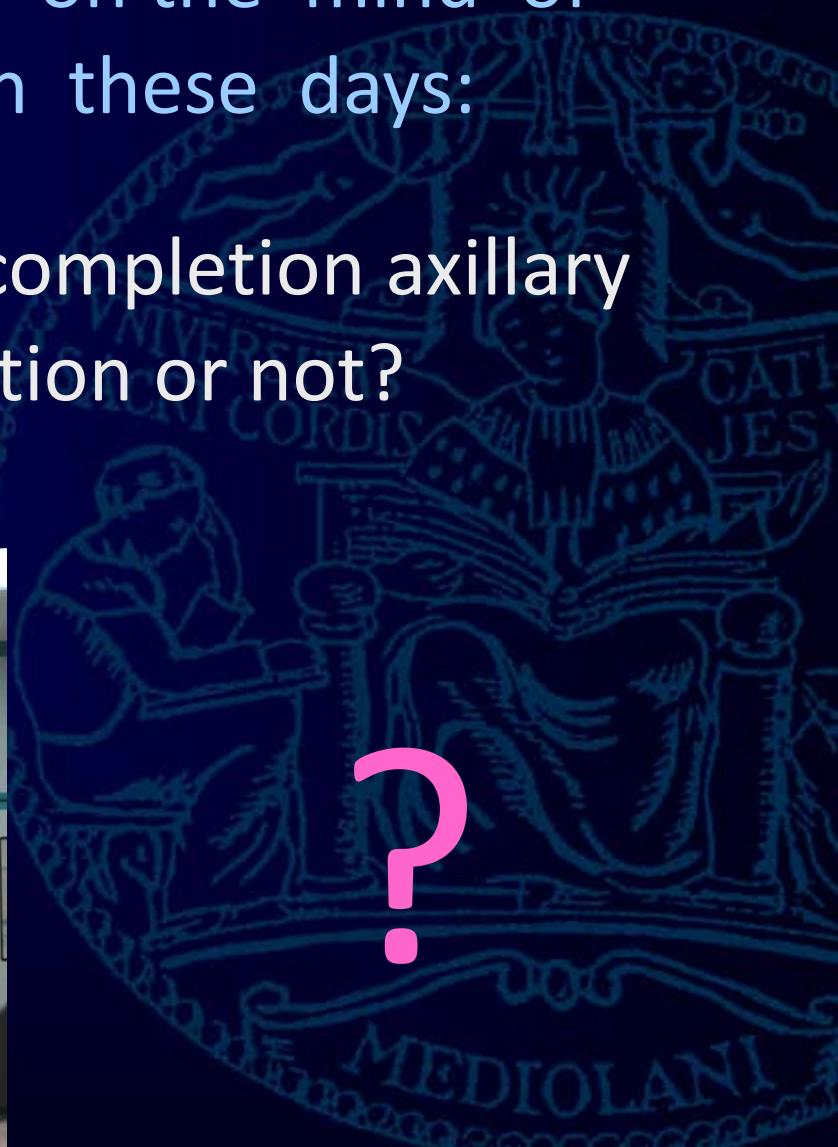
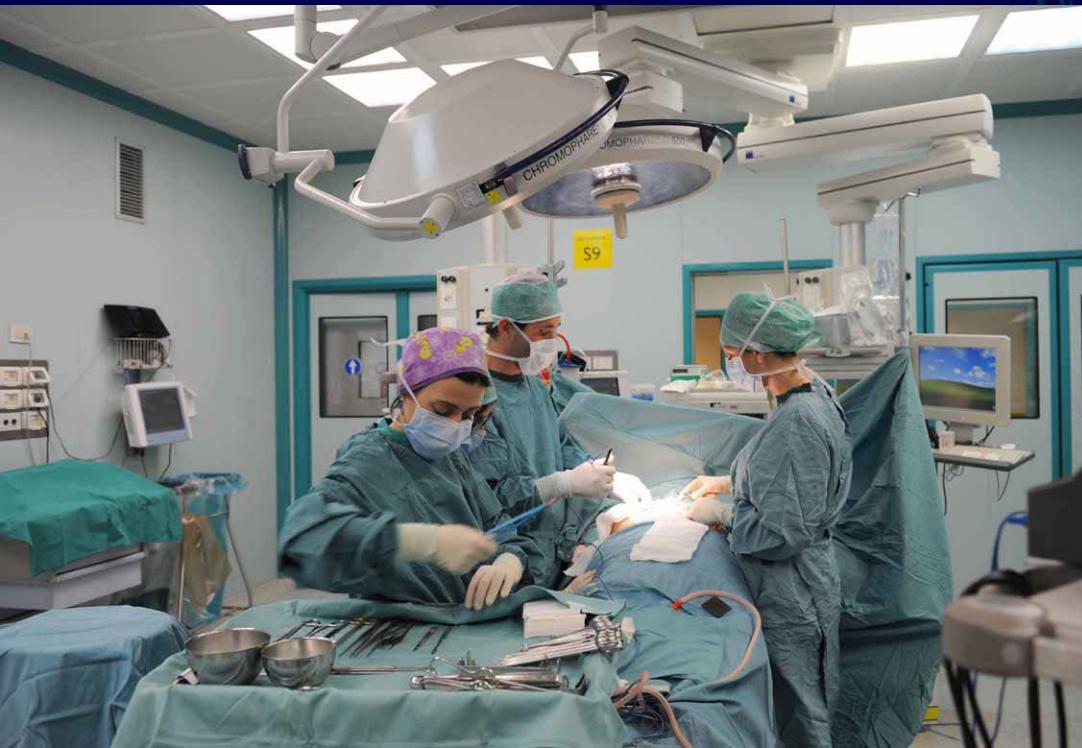
# Positive sentinel node: what to do today

It's today  
reasonable try to  
avoid further  
unnecessary  
axillary dissection



A topic that is generally on the mind of every breast surgeon these days:

Should I go back to do a completion axillary lymph node dissection or not?



# THE DARK SIDE OF THE MOON

- SN MACROMETASTATICO
- SN > 3 LINFONODI POSITIVI
- SN + E MASTECTOMIA + - RT
- SN E NEOADIUVANTE



NOVITA'

## Gruppo di lavoro SENONETWORK



### Documento per consensus conference



attualità in senologia

Firenze, Palazzo dei Congressi, 22-24 gennaio 2014

# LE ULTIME NOVITA' IN TERMINI DI CHIRURGIA



grazie per l'attenzione!!!!



