

3<sup>rd</sup> International Congress  
of Breast Disease Centers 2013

# Breast Reconstruction Two Stages

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# Agenda

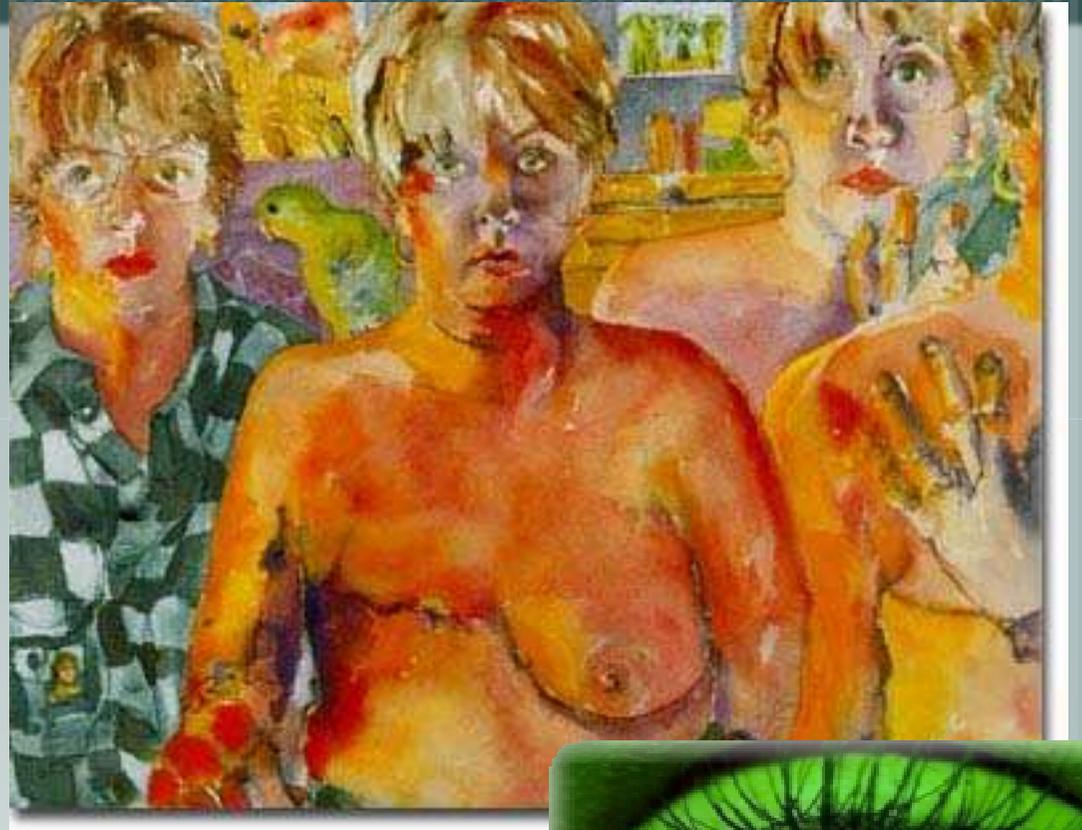
- Introduction
- Selection of technique
  - Indications
  - Pros x Cons
- Dual stage technique
  - Overexpansion
  - Radiotherapy
- Experience of Barrosos
  - Conclusions
  - Invitations

Introduction

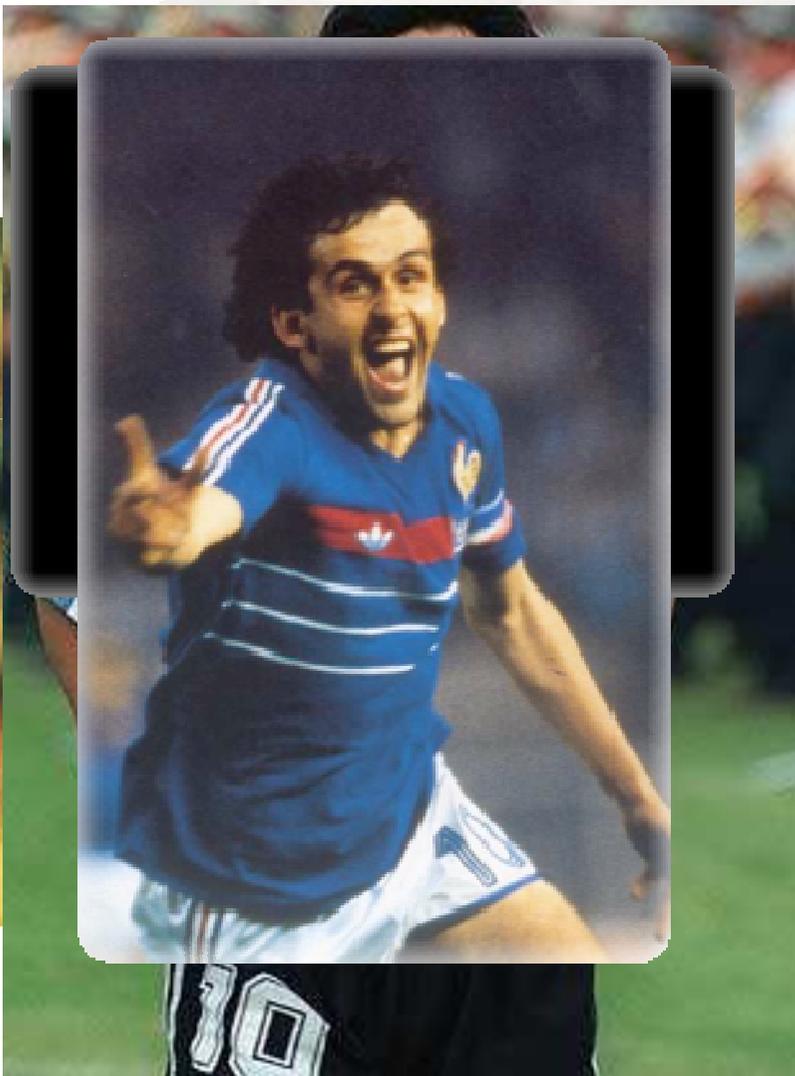
# Radical Surgery

Most common  
surgery for many  
of the Brazilian  
Breast Cancer  
Centers

**15-90%**

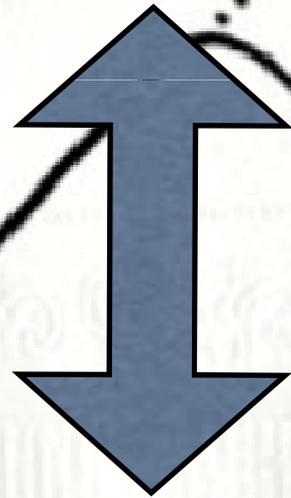


Who is the best soccer player?



Morfology

EXPECTATIONS



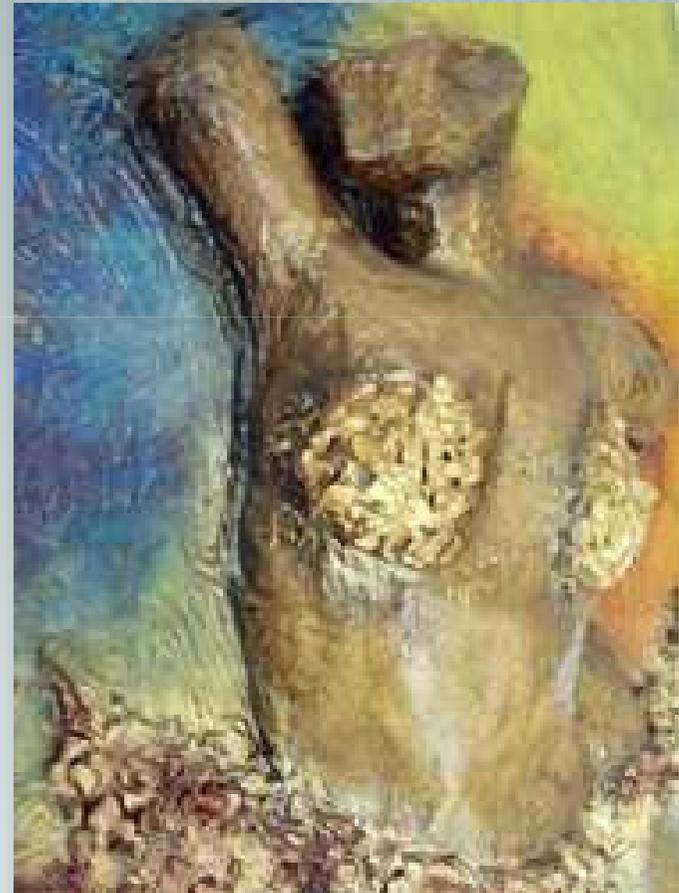
Expectation



# What is the ideal Patient?



# When



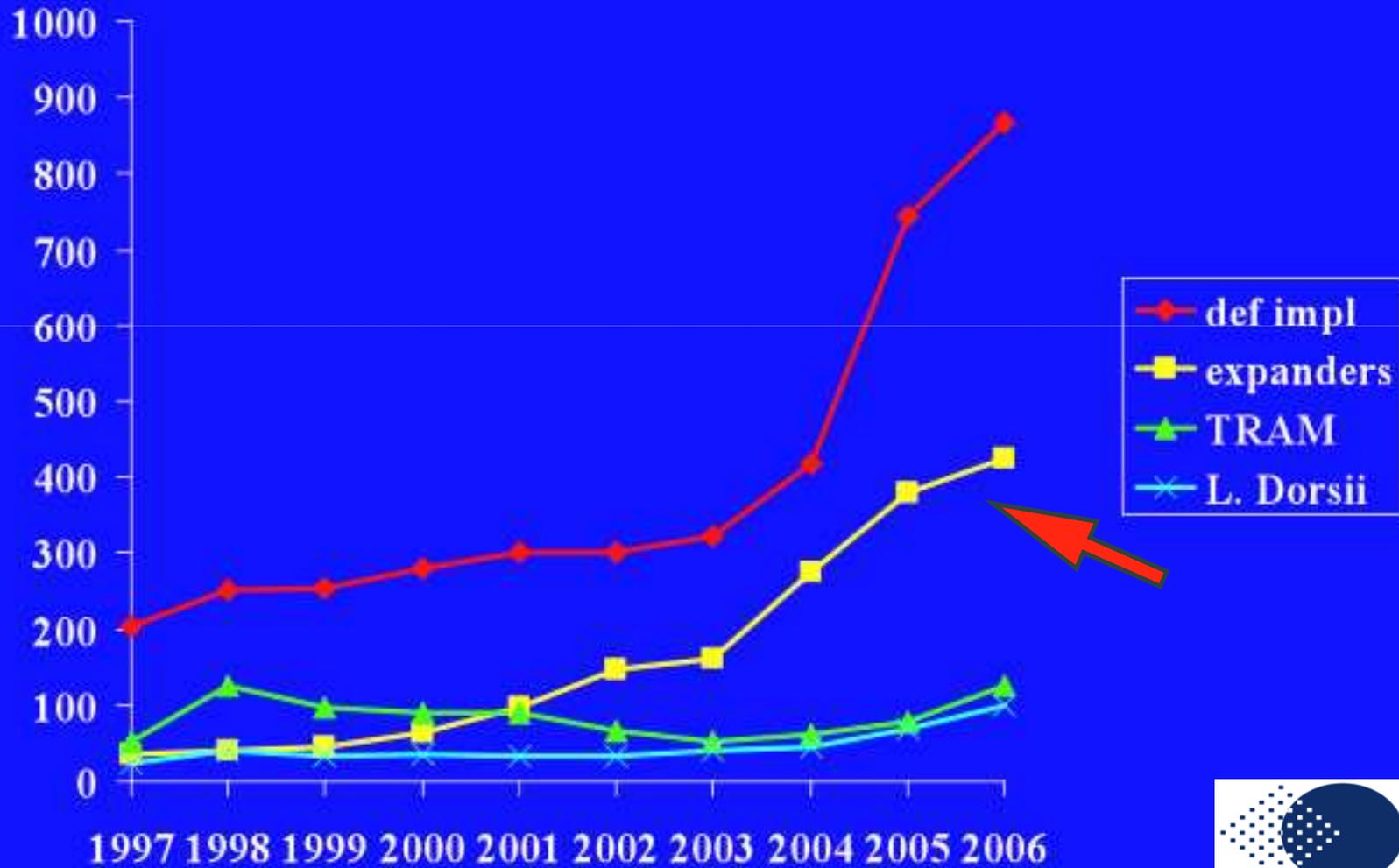
# Indications

- Experience
- Delayed reconstruction (symmetry)
- Desire of breast augmentation
- Quality of the muscle flap
- Inferior outer lower quadrant:  
Tumor
- no additional scars
- impossibility of autogenous reconstruction



Indications

# Experien ce

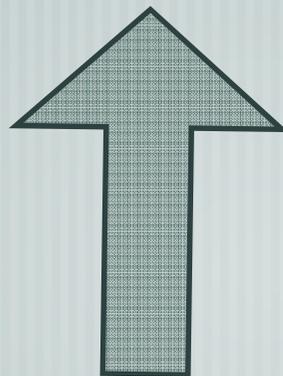
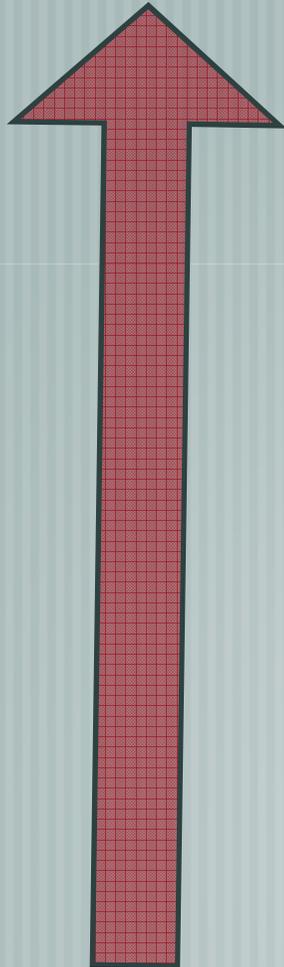


Indications

# Delayed Reconstruction

Expectation

Outcome



Symmetry

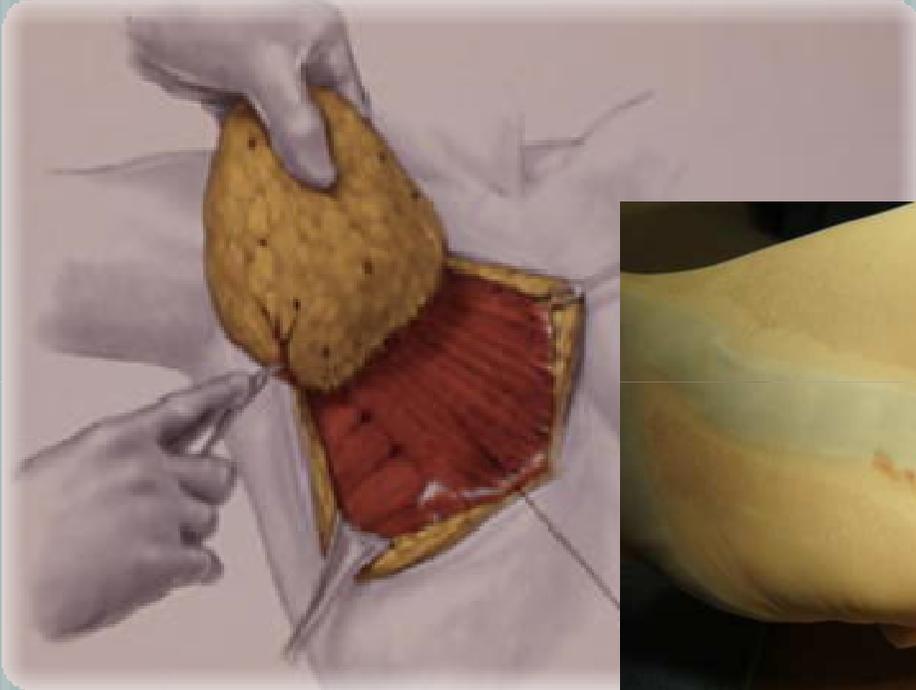


Indicatio  
ns

# Desire Breast Augmentation



# Indications **Quality of Muscle Flap**



Indications

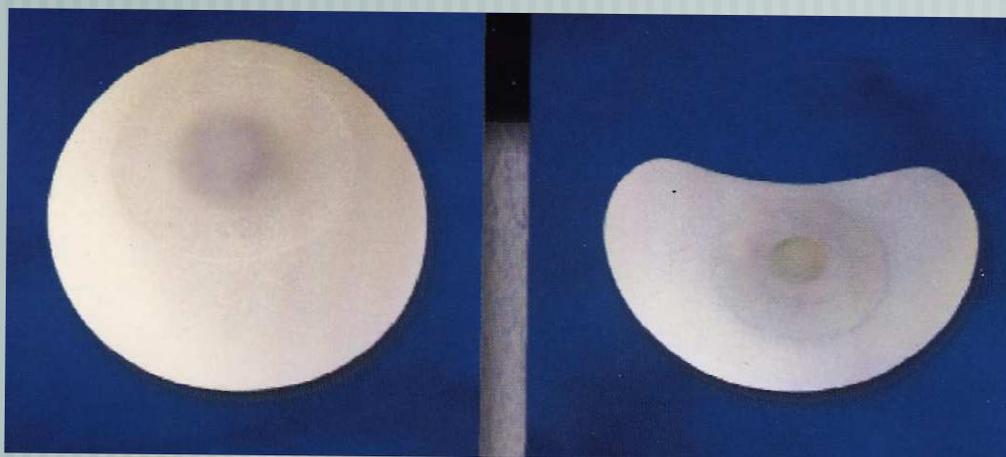
# Lower Outer Quadrant Tumor



# Pros x Cons



# Pros



2 times  
Secondary Procedures  
(Symmetrization ,  
NAC)

Possibility of volume  
adjustment

To allow wound  
recovery

Shorter recovery time

# Cons



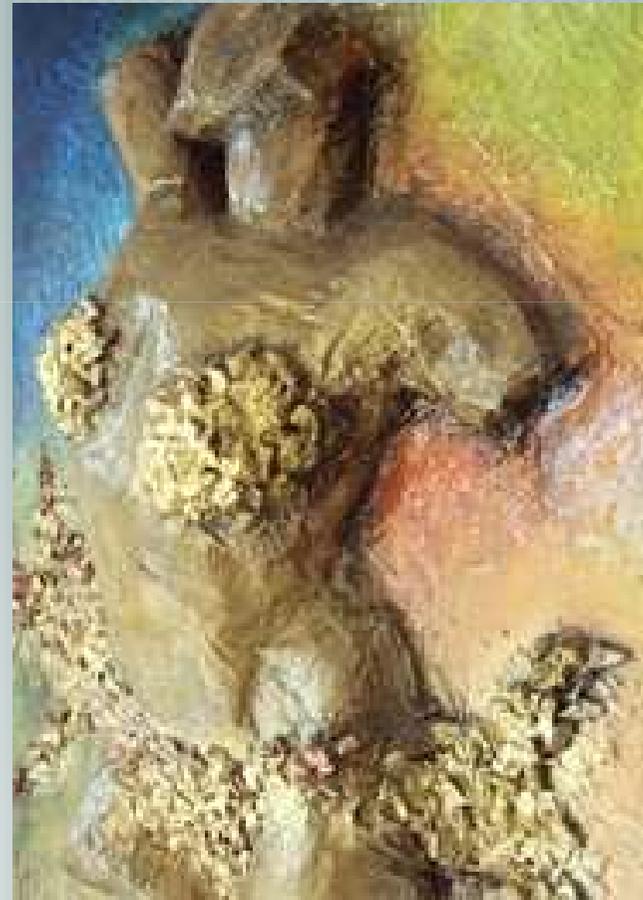
risk-twice

bad skin flaps

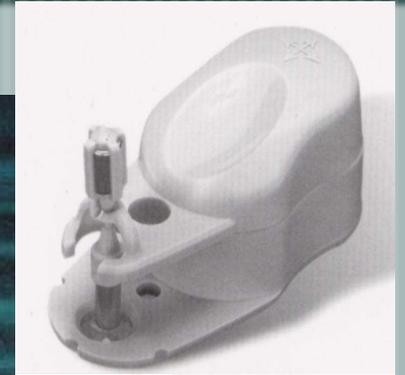
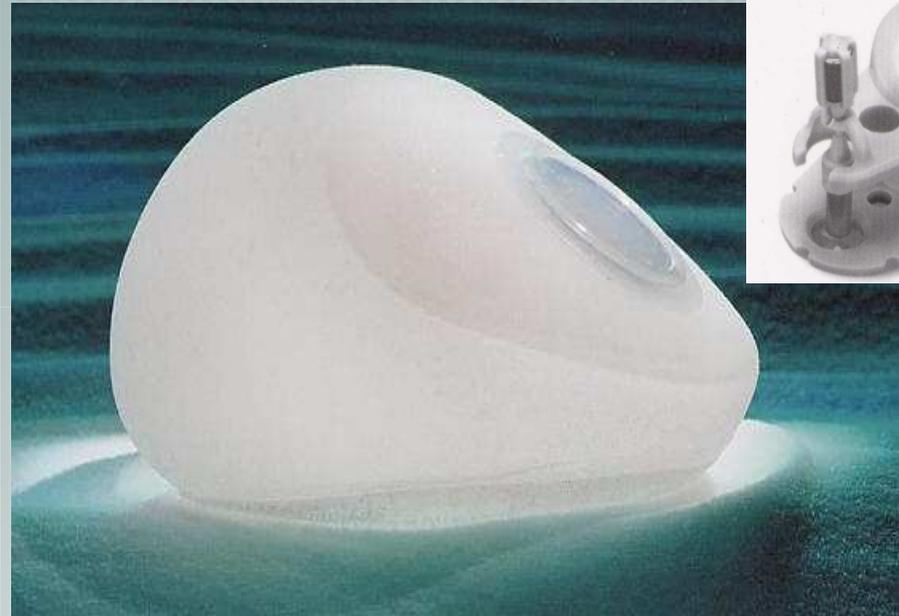
radiotherapy

**The average number of surgeries to complete the reconstruction of the breast is larger in delayed procedures  
(Losken et al - Ann Plast Surg 2004)**

# How to do



# Breast Reconstruction Dual Stages



American Society of Plastic Surgeons  
Report of the 2010 Plastic Surgery Statistics



AMERICAN SOCIETY OF  
PLASTIC SURGEONS

ASPS National Clearinghouse of  
Plastic Surgery Procedural Statistics

RECONSTRUCTIVE PROCEDURES	TOTAL PROCEDURES
Breast reconstruction	93,083
Saline Implants	18,334
Silicone Implants	50,559
Implant alone	9,452
Tissue expander and implant	62,081
TRAM flap	6,758
DIEP flap	5,118
Latissimus Dorsi Flap	6,335
Breast reduction	83,241
Breast implant removals (Reconstructive patients only)	14,991

# Expanders Types

## \* Temporary

- Integrated Dome
- Remote Dome

## \* Definitive

- Remote Dome

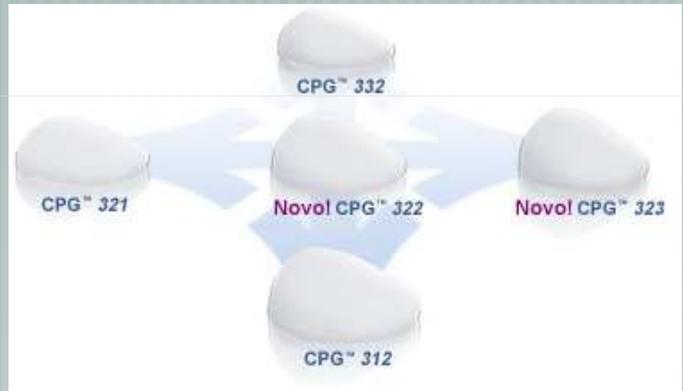
Radiotherapy





## Selection Criteria for Prostheses and Expanders

Correlation?



$Volume = Base - 2x Pinch$



# How to use?

To fill with it up to 100 ml of Saline Solution each 7 days

- surgical care
- quick expansion
- almost all cases
- 3-6 weeks





Final Result

# How to use?



Zucca-Matthes, et al  
2012

# Overexpansion

?

- by 25%
  - to improve the skin drape over the implant
  - to allow for the skin recoil after expansion
  - to allow for differences in the profile expander x implant
- 
- A hand is shown adjusting a dial on a white spherical profile expander. The expander is a large, white, spherical object with a dark circular opening in the center. A hand is visible on the right side, with fingers positioned to turn a small dial or knob on the surface of the sphere. The background is a gradient of blue and white.

# Radiotherapy



# Irradiation after Immediate Tissue Expander/ Implant Breast Reconstruction: Outcomes, Complications, Aesthetic Results, and Satisfaction among 156 Patients

Peter G. Cordeiro, M.D., Andrea L. Pusic, M.D., Joseph J. Disa, M.D., Beryl Mc  
Kimberly VanZee, M.D.



Mastectomy and  
TE placement



Expansion



change for permanent implant



Radiation

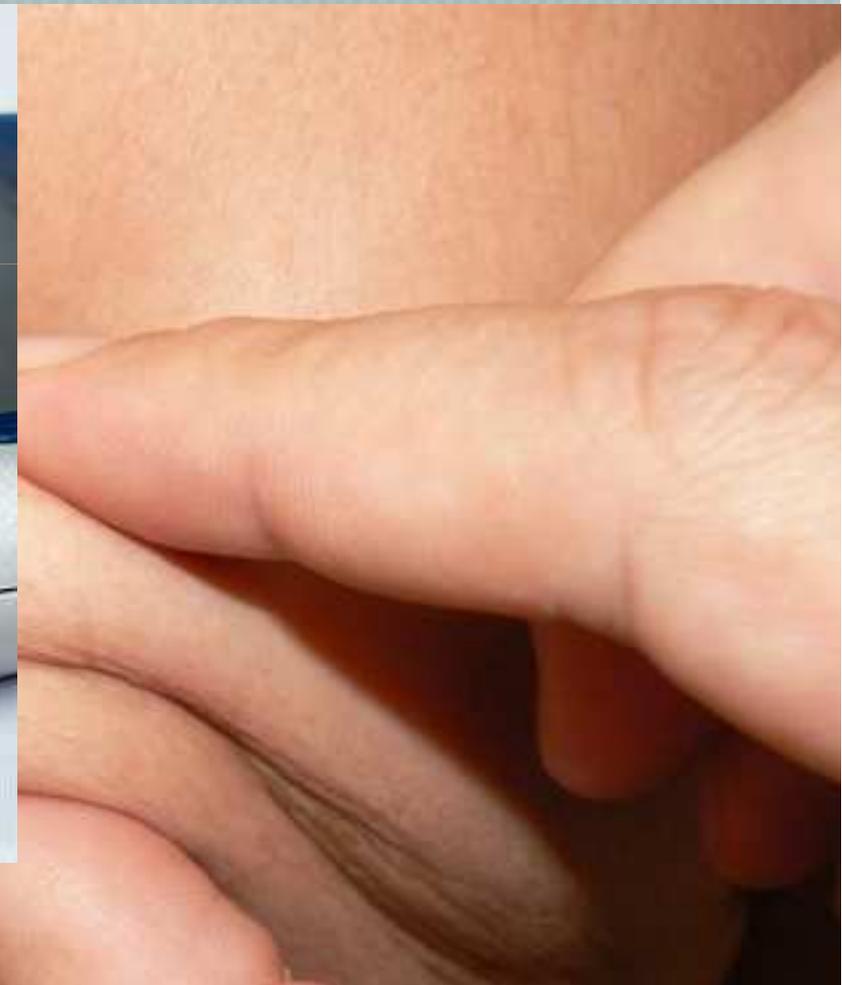
Mastectomy and TE  
placement



Expansion

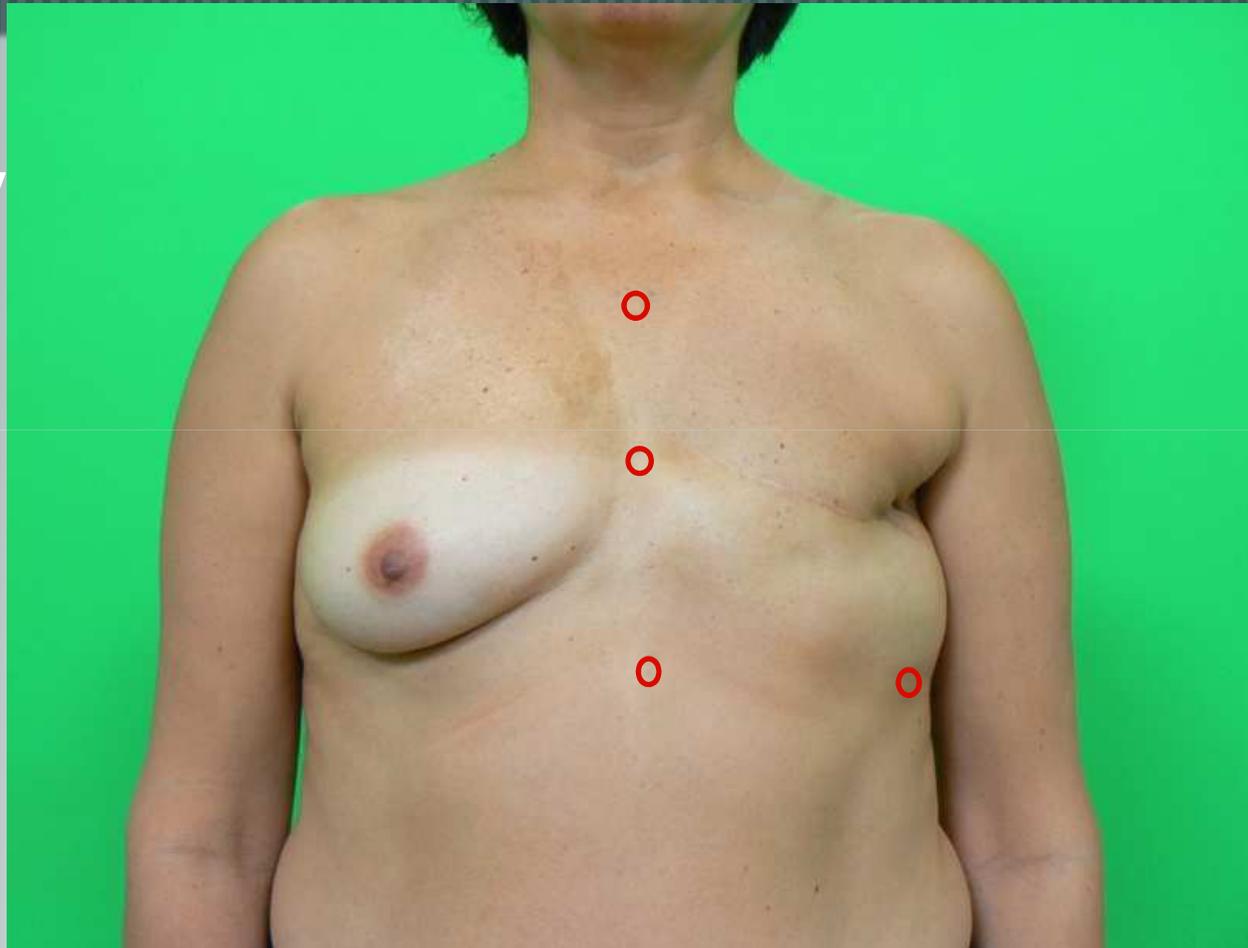


# Contra- indications



# Main Contra-Indication

Previous  
Radiotherapy

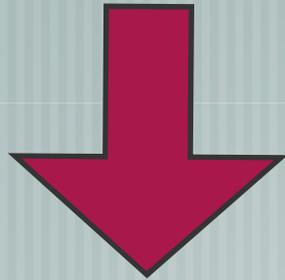


- Bad aesthetic outcomes do not stimulate BR with implants after radiotherapy.

Plast Rec Cir. 2004. 114:950-60

# Post Radiotherapy Reconstruction – Is it possible?

Maybe !



SKIN





Experience





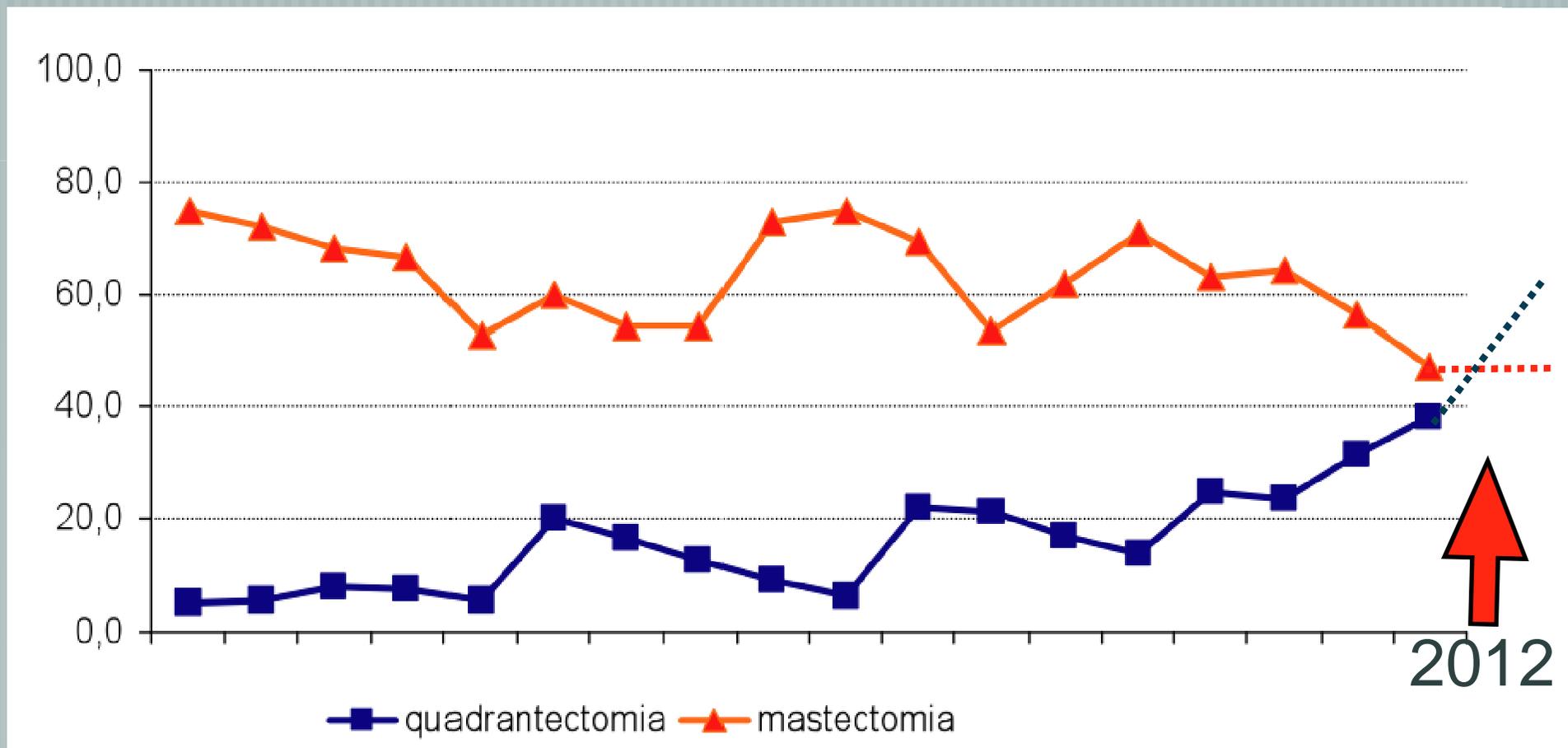
- 2400 procedures

- 1044 new breast cancer patients

- 18000 visits

2011

## Surgical Breast Cancer Treatment



# Flowchart



Mastectomy

Individualization

Breast reconstruction

Colateral Effect

Bad skin - no Rtx

Good skin - no Rtx

Good Skin - with Rtx

Bad Skin - with Rtx

- 1- Lipofilling / Expander / Becker
- 2- LD Prosthesis/ Expander
- 3- TRAM

- 1- Prosthesis
- 2- Becker /Expander
- 3- LD Prosthesis/ Expander
- 4- TRAM

- 1- expander/Becker
- 2- TRAM
- 3- LD Prosthesis/ Expander

- 1- TRAM
- 2- LD Prosthesis/ Expander
- 3- External Prosthesis



# Experience (last 3 months)

CIRURGIA	NÚMERO	FREQUÊNCIA
<b>RETALHO MIOCUTÂNEO (15,4%)</b>		
Retalho miocutâneo do grande dorsal	58	5,8
Retalho miocutâneo do grande dorsal + prótese	11	1,1
Retalho miocutâneo do reto-abdominal	23	2,3
<b>SIMETRIZAÇÃO (10,0%)</b>		
Quadrantectomia + simetriação	8	0,8
Plástica mamária não estro + prótese + simetriação	2	0,2
<b>PRÓTESE MAMÁRIA (14,5%)</b>		
Prótese Mamária	35	12,7
Mastectomia subcutânea + Prótese	5	1,8
<b>RECONSTRUÇÃO (40,0%)</b>		
Reconstrução Mamária SOE	33	12,0
Reconstrução Mamária Pós-Mastectomia	73	26,5
Toracectomia	1	0,4
Lipofiling	3	1,1
<b>CIRURGIA DA COMPLICAÇÃO (7,6%)</b>		
Capsulotomia e prótese		
Retirada de prótese		
Correção do TRAM		
Correção de Hérnia do TRAM		
Ressutura de Parede		
<b>TOTAL</b>		

**- Mastectomies: 29,6%**  
**- Immediate Reconstruction: 37%**  
**- Oncoplastic Surgery: 32%**

**92% implants**  
**(2% expanders)**

# Why ?

HOSPITAL  
DE CÂNCER DE  
BARRETOS

Fundação Pio XII



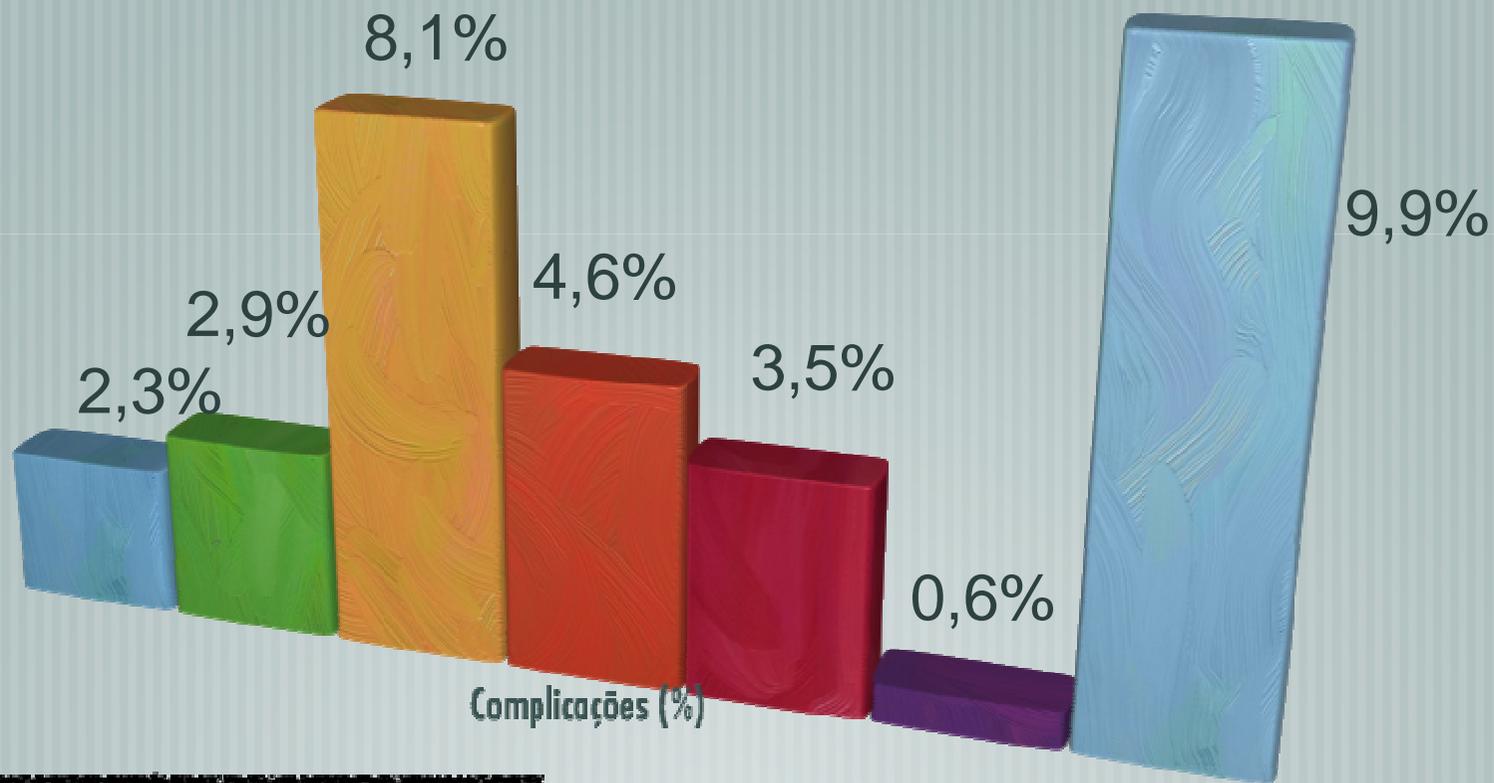
# OPtimizaTION



# Complications Experience (oct/11 - aug/12)



Infections   Hematomas   Open wound   Necrosis   Epidermolises   Lost Protheses  
Seromas

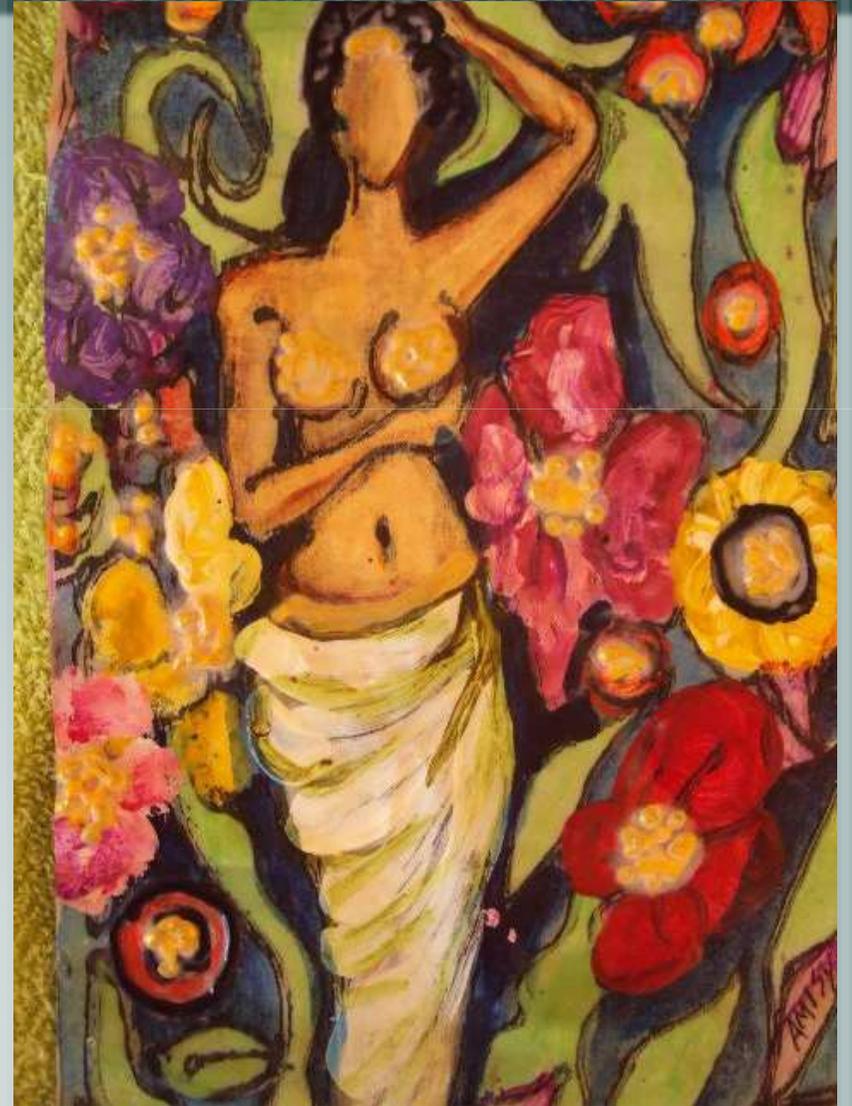


Total Surgeries: 627



# Conclusions

- \* Reconstruction must be part of the treatment
- \* One-by-one study of each case
- \* Selected Patients
- \* Low complications rates





# Acknowledgements...



## Mastology

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## Paliative Care

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Renata





CENTRO DE TREINAMENTO EM  
**Oncoplástica**  
HOSPITAL DE CÂNCER DE BARRETOS



Zucca-Matthes et al, 2012



Join us in Miami, 2013!



[www.ihboc.com.br](http://www.ihboc.com.br)





Breast surgeons must treat  
the local-regional disease  
and keep the quality of life  
of our patients



FLAM

Take home message!