

# STANDARDIZATION OF ONCOPLASTIC BREAST SURGERY

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# MSKCC breast service



# Basel oncoplastic surgery team



# Oncoplastic surgery

1. Can oncoplastic breast conserving surgery (OPS) be considered an evidence-based standard?

*Weber WP, et al. Breast. 2017 Aug;34:78-81.*

2. How can OPS be standardized?

*Weber WP, et al. Eur J Surg Oncol. 2017 Jul;43(7):1236-1243.*

3. What are current OPS standards?

*Weber WP, et al. Breast Cancer Res Treat. 2017 Aug;165(1):139-149*

# Oncologic safety of OPS

- No randomized controlled trials
- Review of oncologic outcomes after OPS<sup>1</sup>
  - 55 studies, 6011 patients, 4.2 y follow-up
  - OS 95%, DFS 90%
  - Local recurrence rate 3.2%
  - Positive margin rate 10.8%, re-excision rate 6%

<sup>1</sup>De La Cruz L, et al. Ann Surg Oncol. 2016 Oct;23(10):3247-58

# Complications of OPS

## OPS → escalation of surgery

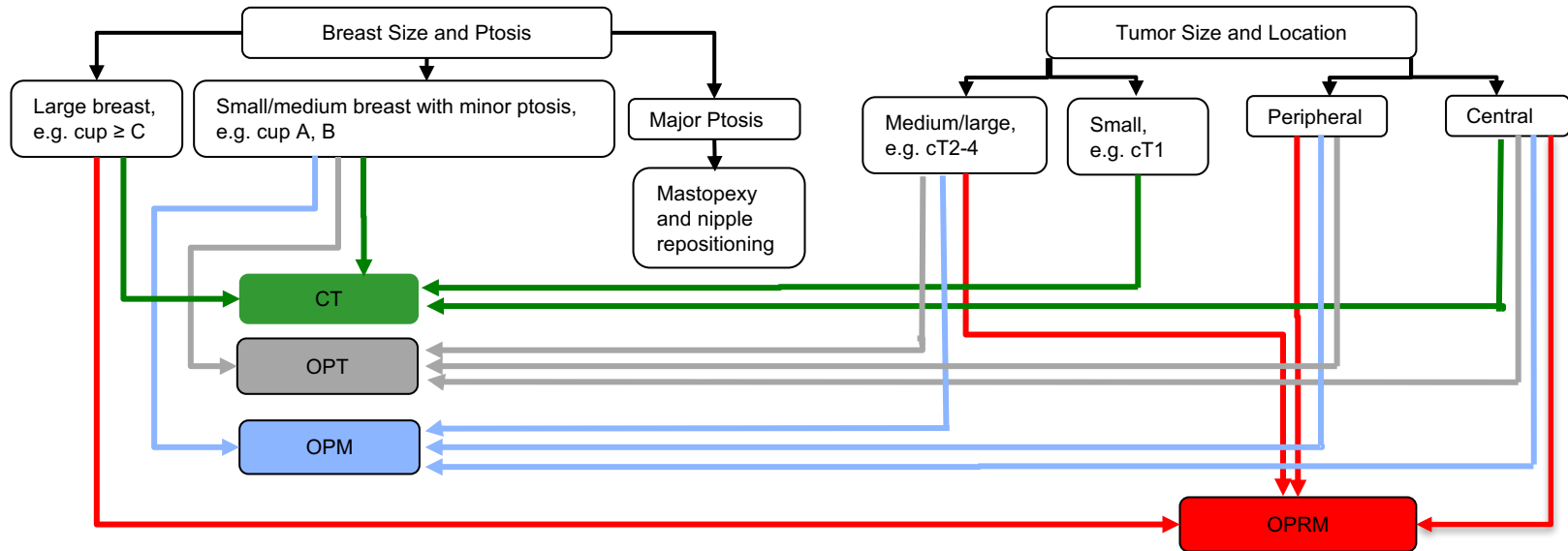
- Review of 11 prospective studies, 998 patients<sup>1</sup>
  - Early complication rate around 20%
  - Delayed wound healing, surgical site infection, seroma
- Surgical antimicrobial prophylaxis within one hour before surgery<sup>2</sup>

<sup>1</sup>Haloua MH, et al. Ann Surg. 2013 Apr;257(4):609-20.

<sup>2</sup>Weber WP, et al. Lancet Infect Dis. 2017 Jun;17(6):605-614.

# Standardization of OPS

## Basel indication algorithm



CT: Conventional tumorectomy

OPT: Oncoplastic tumorectomy

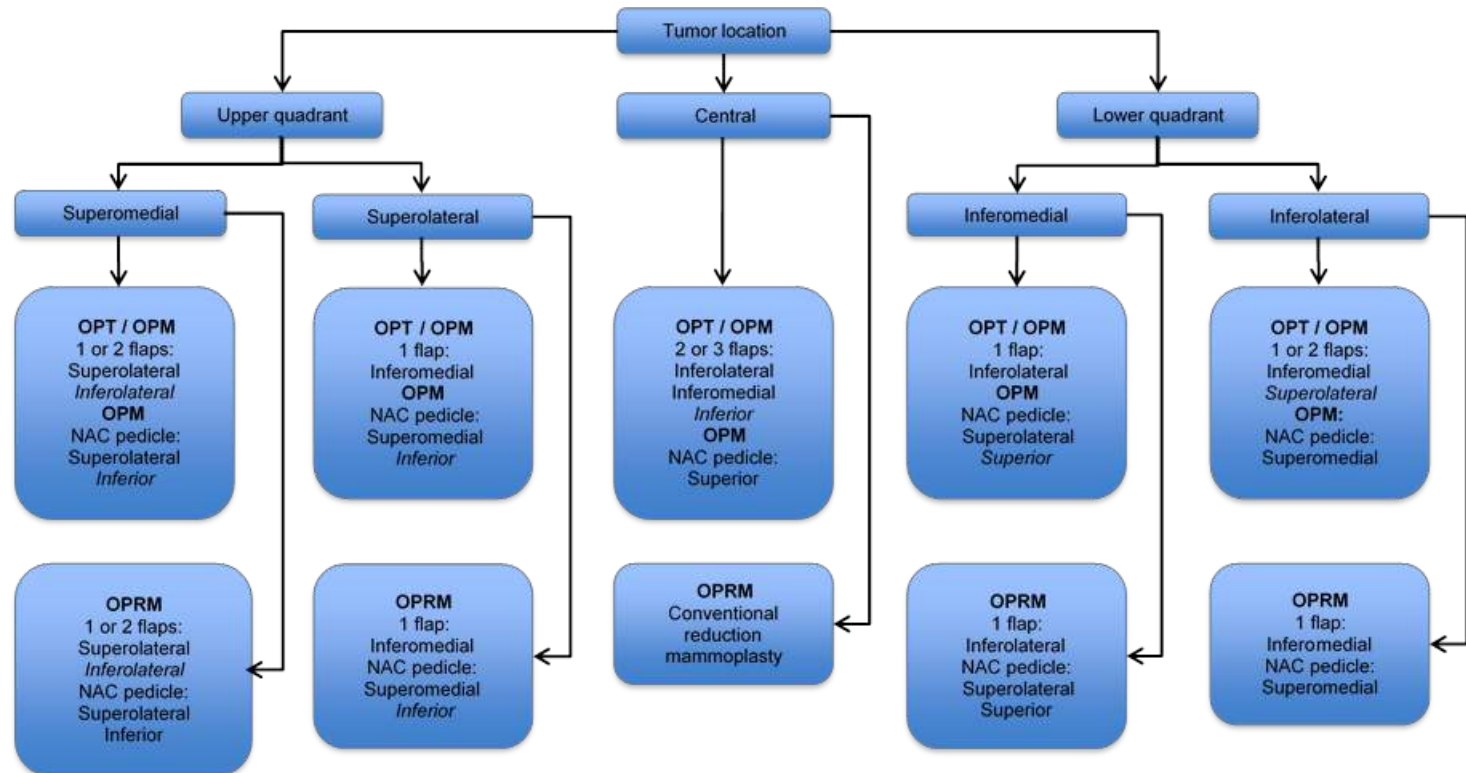
OPM: Oncoplastic mastopexy

OPRM: Oncoplastic reduction mammoplasty

Cup = Bra size; cT = American Joint Committee on Cancer clinical tumor stage

# Standardization of OPS

## Basel partial breast reconstruction algorithm



OPT: Oncoplastic tumorectomy

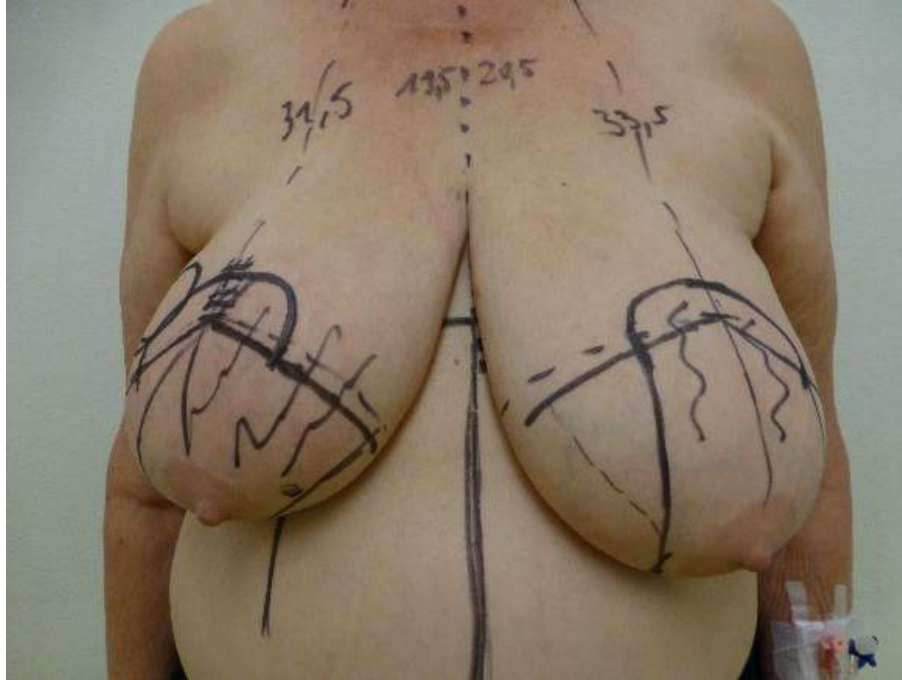
OPM: Oncoplastic mastopexy

OPRM: Oncoplastic reduction mammoplasty

Alternative flaps and pedicles are written in italics

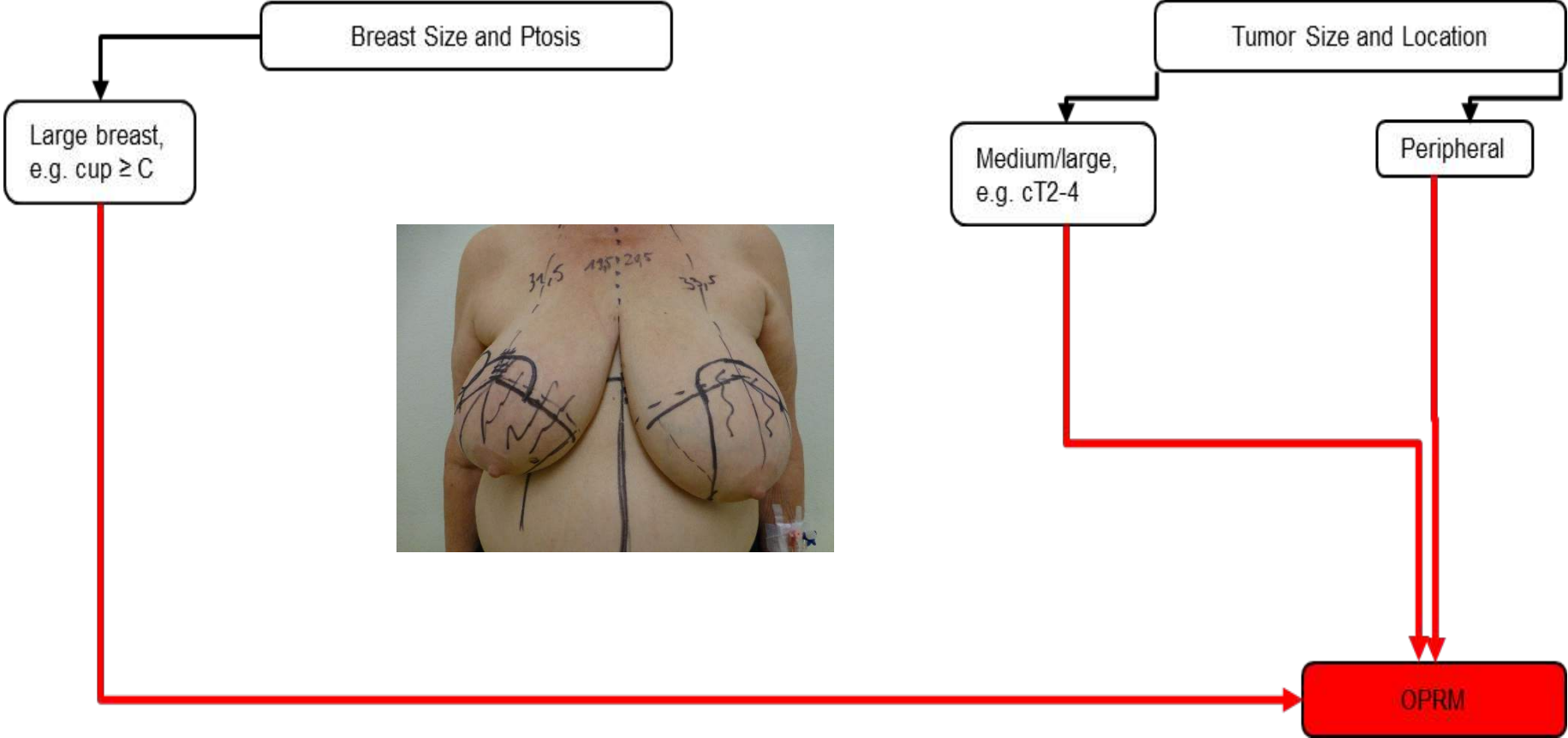


# How are these algorithms used?



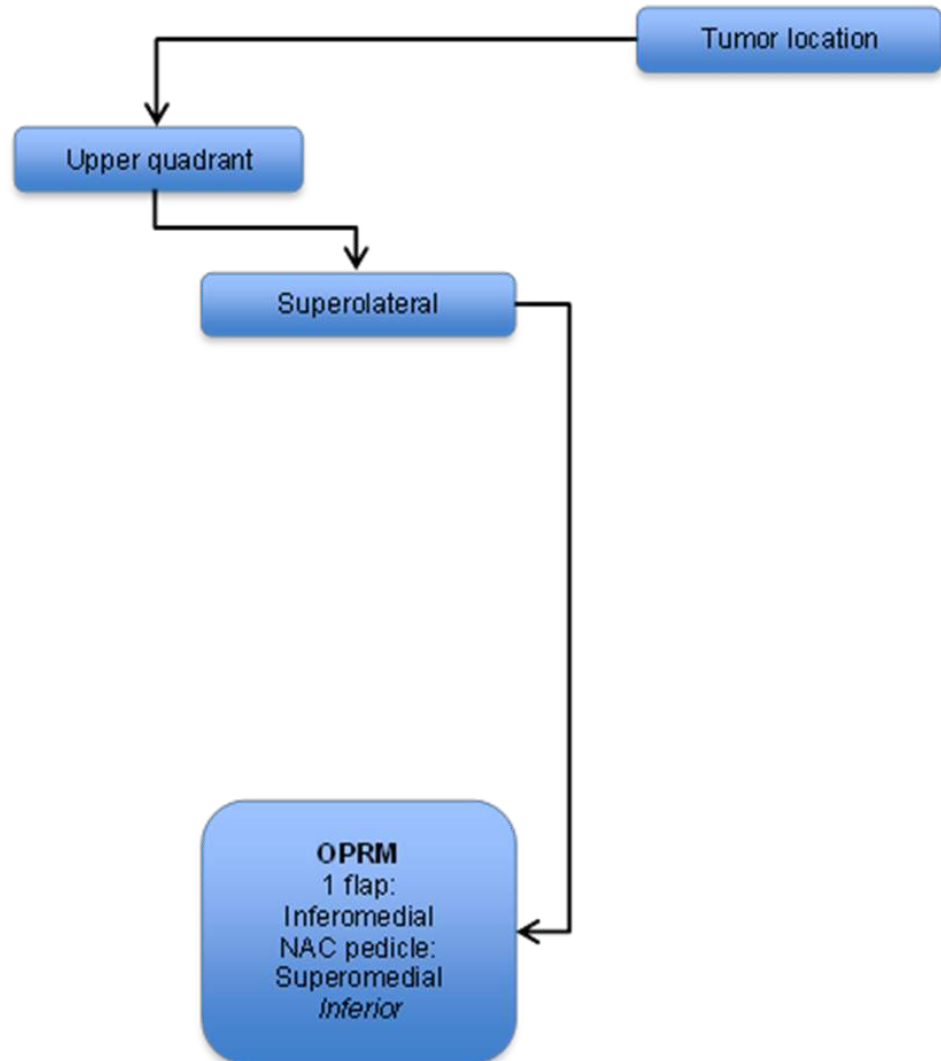
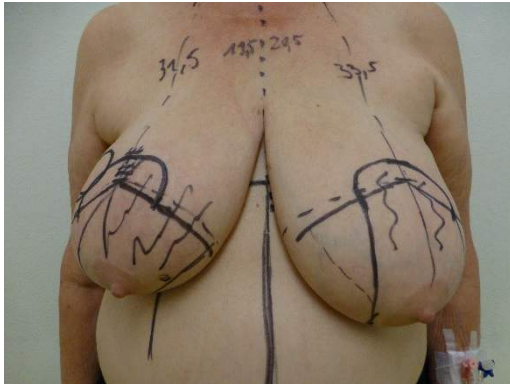
# Standardization of OPS

## Basel indication algorithm

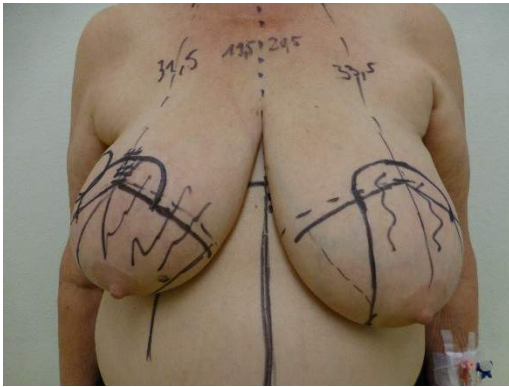


# Standardization of OPS

## Basal partial breast reconstruction algorithm



# Oncoplastic reduction mammoplasty with superomedial pedicle and inferomedial glandular flap



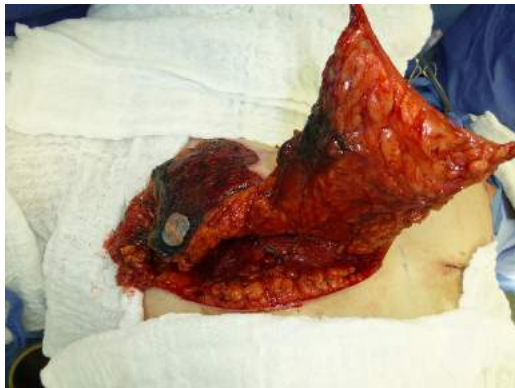
a



b



c



d



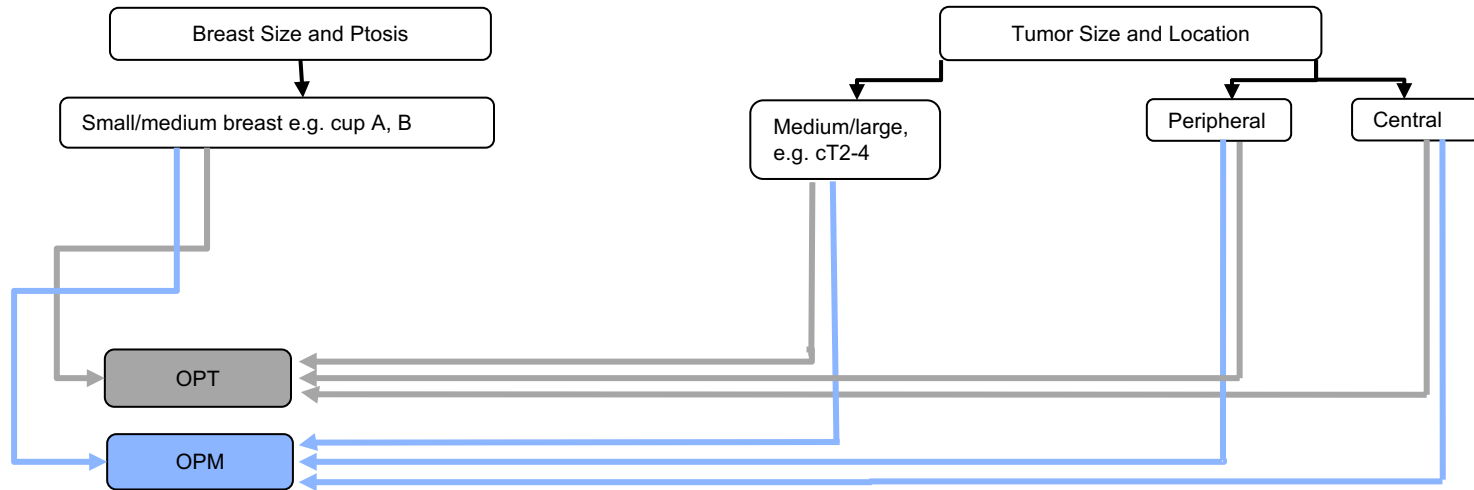
e



f: 2 years after surgery

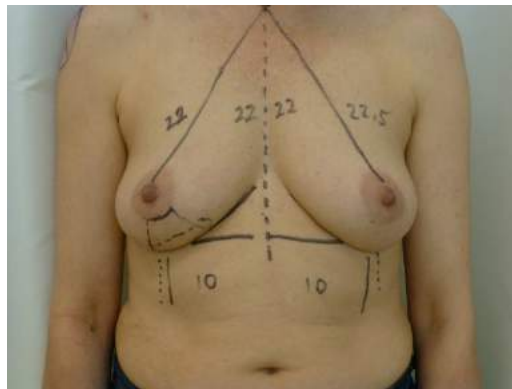
# Standardization of OPS

## Basel indication algorithm



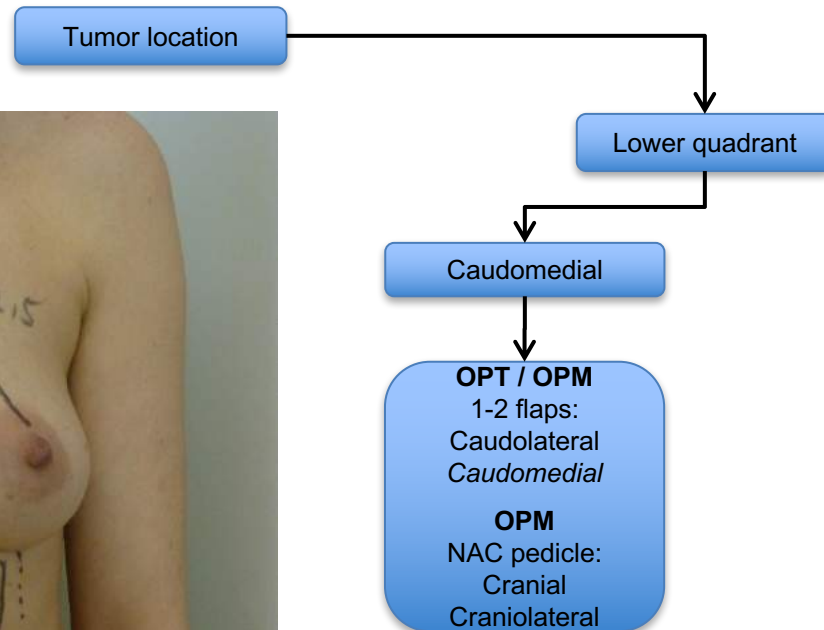
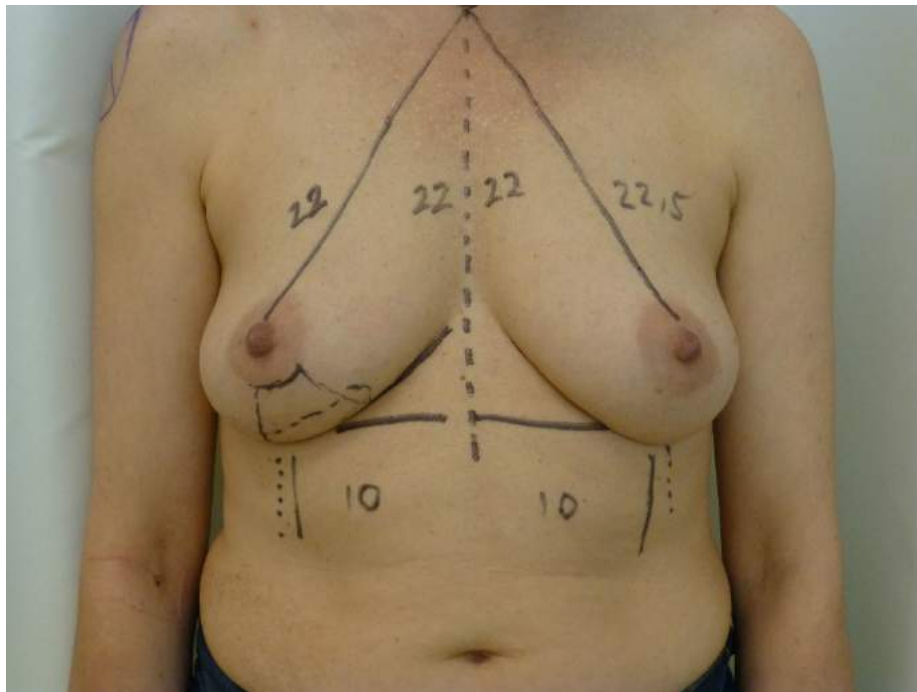
OPT: Oncoplastic tumorectomy

OPM: Oncoplastic mastopexy



# Standardization of OPS

## Basel partial breast reconstruction algorithm



# Oncoplastic mastopexy

## Triangle excision<sup>1</sup> or V-mammoplasty<sup>2</sup>



a



b



c



d



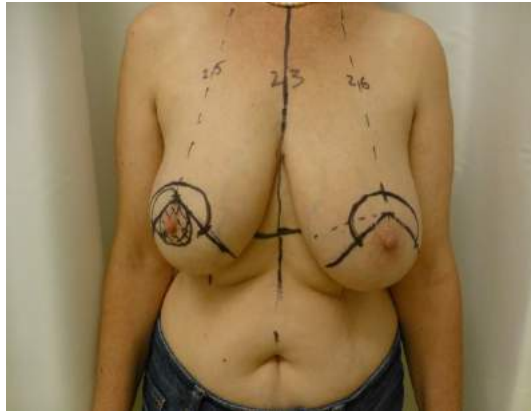
e + f: 1 year after surgery

<sup>1</sup> Silverstein MJ et al. Journal of Surgical Oncology 2014;110:82–89

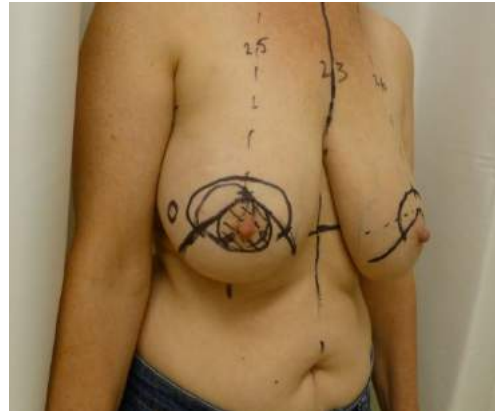
<sup>2</sup> Clough KB, et al. Ann Surg Oncol. 2010 May;17(5):1375-91.

# Top 6 OPS procedures

## Nr. 1: Oncoplastic reduction mammoplasty<sup>1</sup>



a



b



c



d



e



f: 2 years after surgery

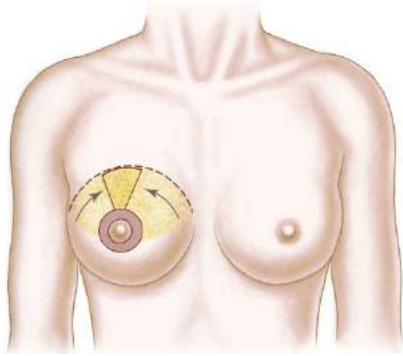
<sup>1</sup>Clough et al. *Plast Reconstr Surg.* 1995 Aug;96(2):363-70.

a-f Weber WP, Haug M, et al. *Eur J Surg Oncol.* 2017 Jan 31 [Epub ahead of print]



# Top 6 OPS procedures

## Nr. 2: Donut (round block / Benelli) mastopexy



a



b



c



d

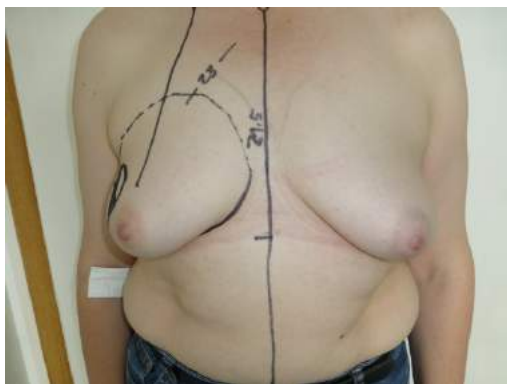


e + f: 2 years after surgery

<sup>1</sup>Benelli L. Aesthetic Plast Surg. 1990 Spring;14(2):93-100.

# Top 6 OPS procedures

## Nr. 3: Volume replacement



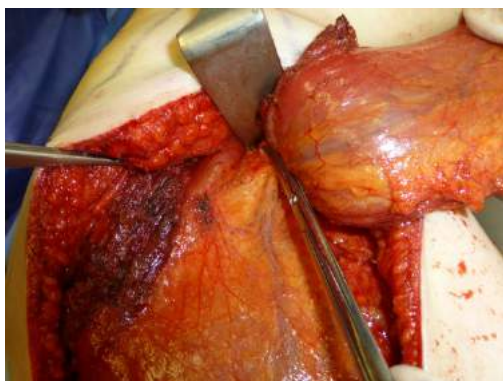
a



b



c



d



e



f: 2 years after surgery

# Top 4 OPS procedures

## Nr. 4: Grisotti<sup>1</sup> mastopexy (B technique)



a



b



c



d



e



f: 2 years after surgery

<sup>1</sup>Galimberti V, Grisotti A, et al. Eur J Cancer. 1993;29A(8):1093-6.

# Retroareolar tumors

## Modified Grisotti mastopexy



a



b



c



d



e



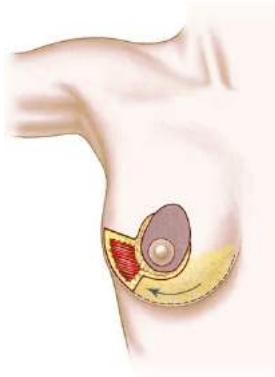
f: 1,5 years after surgery

<sup>1</sup>Galimberti V, Grisotti A, et al. Eur J Cancer. 1993;29A(8):1093-6.

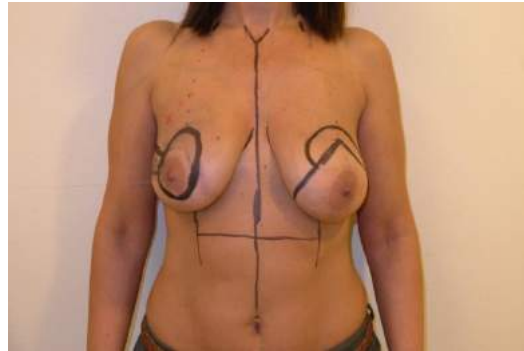
<sup>b-f</sup>Weber WP, Haug M, et al. Eur J Surg Oncol. 2017 Jul;43(7):1236-1243.

# Top 6 OPS procedures

## Nr. 5: Racquet (hemibatwing) mammoplasty



a



b



c



d



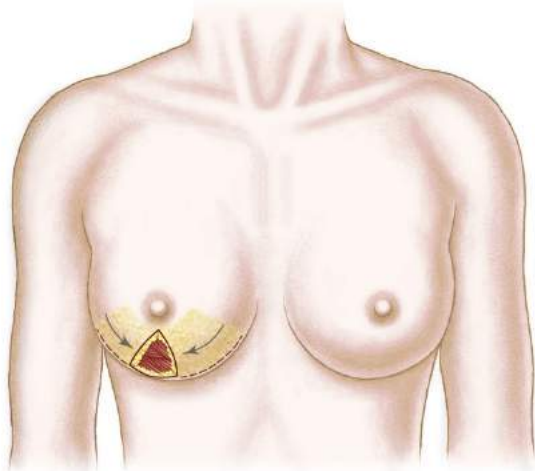
e



f: 2 years after surgery

# Top 6 OPS procedures

## Nr. 6: Triangle excision or V-mammoplasty



a



b



c



d

3 years after surgery

# What are current OPS standards?

## 1st international OPS consensus conference

- German, Austrian and Swiss (D-A-CH) panel
- Basel, Feb 2017
- 26 panelists
- 4 hours
- 60 questions



Weber WP, et al. Breast Cancer Res Treat. 2017 Aug;165(1):139-149.

# 1st international OPS consensus conference

Yes No Abstain

## There is a need for standardization of OPS





# 1st international OPS consensus conference

Yes No Abstain

## In general, every OPS procedure

- Should be tailored to the individual patient



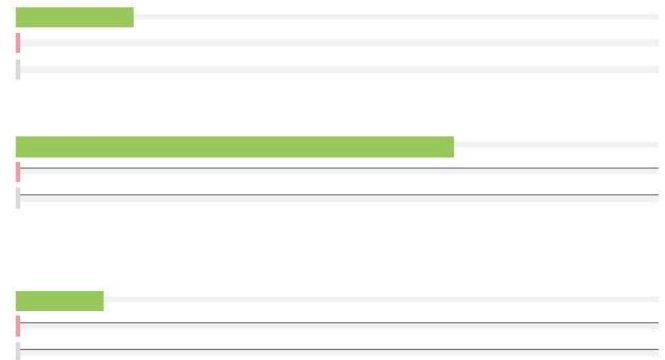
# 1st international OPS consensus conference

Yes No Abstain

## Which one of the three proposed classification systems is most useful

In clinical practice for indicating, planning and performing the procedure

- The Tübingen complexity-based classification
- The Clough bilevel classification and quadrant per quadrant atlas
- The Basel nomenclature, indication and reconstruction algorithms



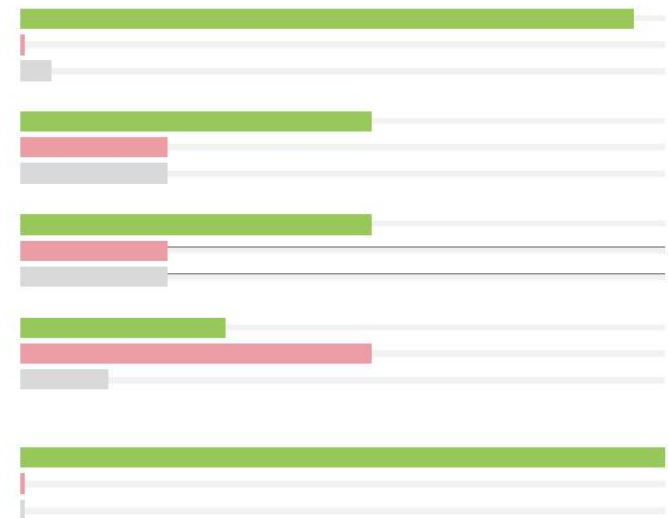
# 1st international OPS consensus conference

Yes No Abstain

## Goals and Indications of OPS

Compared to conventional breast conserving surgery, OPS can be used to

- Improve esthetic outcomes
- Improve quality of life
- Reduce reoperation rates for positive margins
- Reduce local recurrence rates
- Broaden the indication to larger or multifocal tumors as alternative to mastectomy

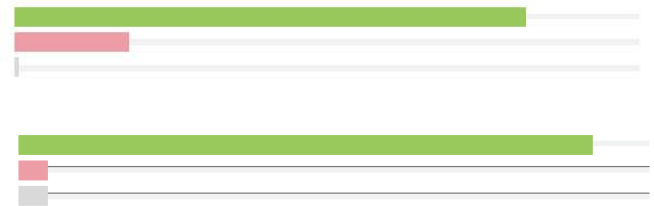


# 1st international OPS consensus conference

Yes No Abstain

## Outcome assessment of OPS should be standardized in clinical practice

- To include pre- and postoperative pictures
- To include patient-reported outcome measurements



# 1st international OPS consensus conference

Yes No Abstain

## Outcome assessment of OPS should be standardized in clinical practice

- To include **all** scales of the BreastQ-Breast Conserving Therapy Module
- To include **selected scales** of the BreastQ-Breast Conserving Therapy Module\*



\*e.g. satisfaction with breasts scale +/- psychosocial well-being



# Oncoplastic Breast Consortium



- [www.oncoplasticbc.org](http://www.oncoplasticbc.org)
- 407 surgeons
- 34 patient advocates
- 70 countries
- Consensus conferences
- Research
- Education



Weber WP, et al. Breast Cancer Res Treat. **2018** Dec;172(3):523-537.  
Weber WP, et al. Breast Cancer Res Treat. **2017** Aug;165(1):139-149.

# OPBC Award Committee

Walter P. Weber  
Switzerland



Jörg Heil  
Germany



Florian Fitzal  
Austria



→ First OPBC Award in Sept 2019 during next OPBC consensus conference with 60 of the world's best breast surgeons from 24 countries

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Jörg Heil  
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Florian Fitzal  
Austria



- OPBC Award Winner 2019: **Zoltán Mátrai**



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