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Surgical prodedures and the requirements of the German S3 Guidelines

PD Dr. Markus Hahn
University Breast Center of Tuebingen, Germany

What are the S3-Guidelines?
What are the surgical requirements?
German results – quality assurence

BREAST CANCER

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S3 – Guidelines

Highest quality level in guideline development (Definition of the Scientific Medical Societies in Germany).

Statement Gen-1

Excision of the tumor with a negative resection margin (R0) is the basis of therapy for all non-advanced breast carcinomas.
LOE 1b, Grade of Recommendation A (Blichert-Toft, M et al. 1998; Renton, SC et al. 1996)

www.senologie.org

German Cancer Society and Germany Society for Gynecology and Obstetrics

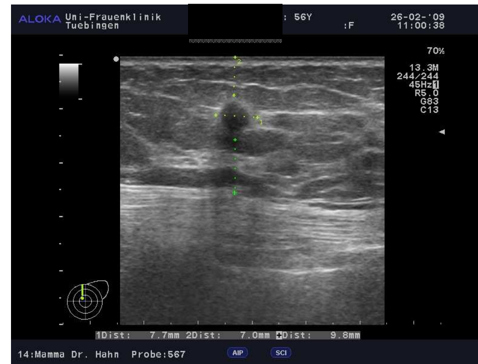
"The objective of the nationwide distribution and implementation of the S3 Guidelines is to optimize the diagnostic chain and the stage-appropriate treatment of the first occurrence of the disease as well as any recurrences and/or metastases. In the medium and long term this is expected to result in lower mortality rates and an enhanced quality of life for women with breast cancer."

Chapter: Surgery

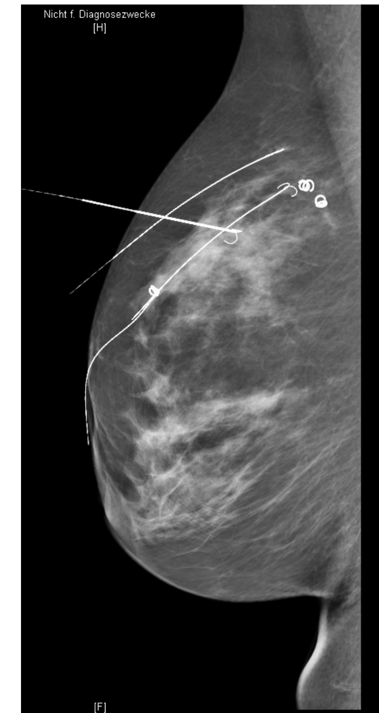
The 3 pillars of surgical approach:

- Oncological safety
- Low morbidity
- Good cosmetic results

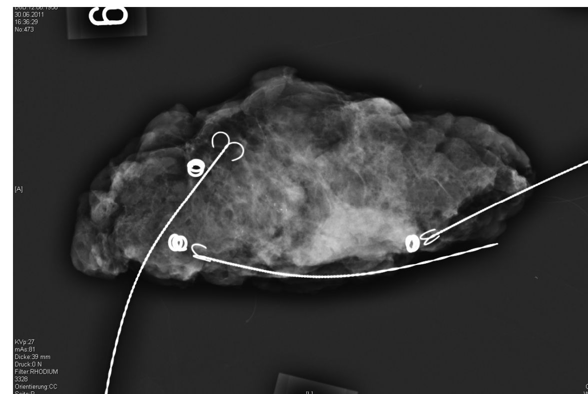
1. Find the tumor



2. Locate the tumor



3. Excise the tumor



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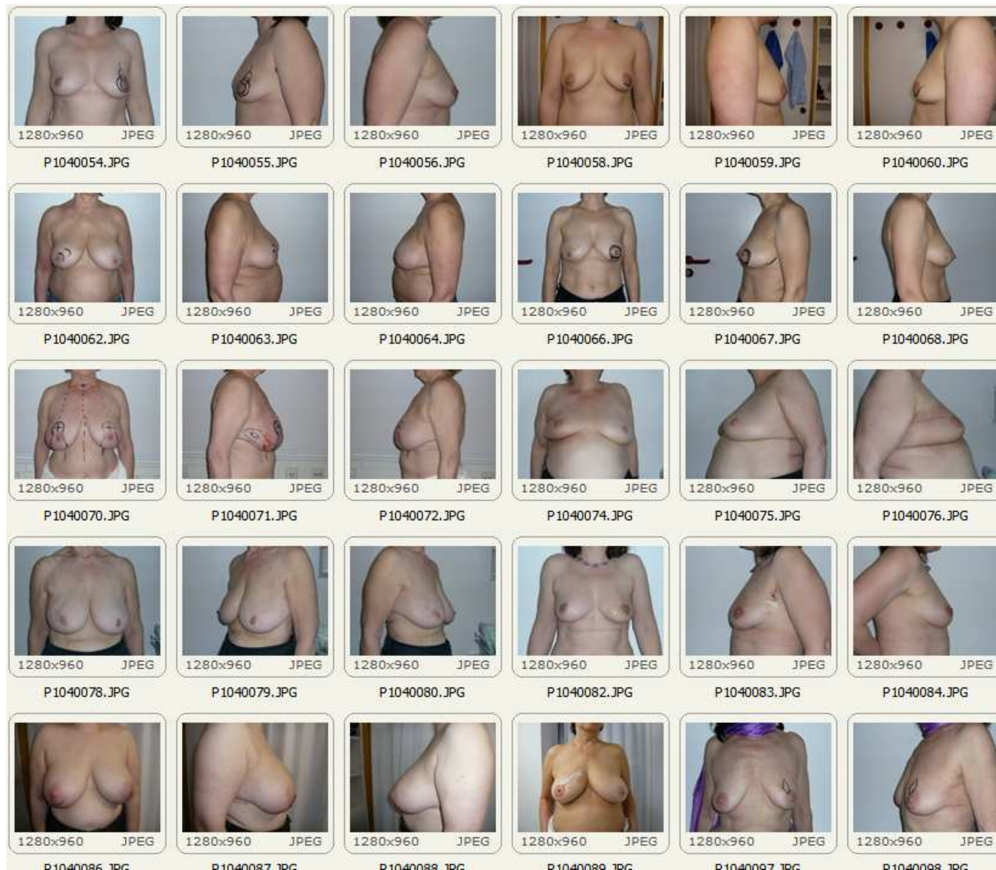

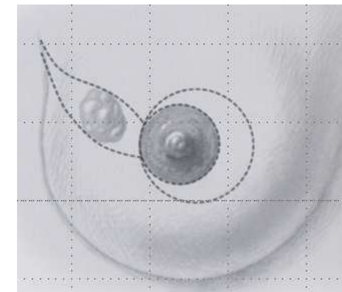

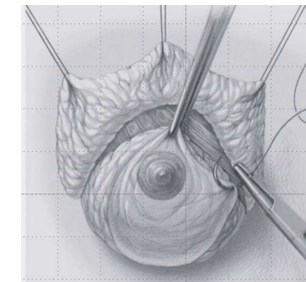

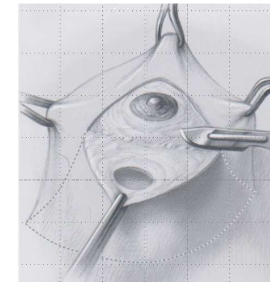

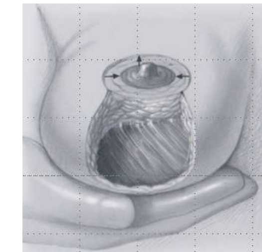

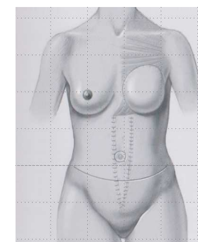

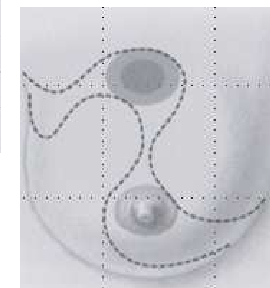

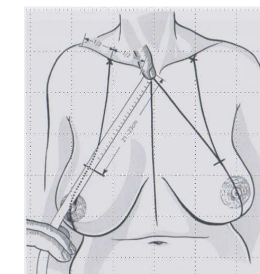

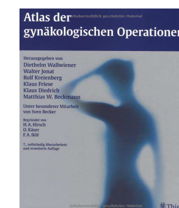

Wallwiener et al.:
Atlas der Gynäkologischen Operationen

Chapter: Surgery

S3 Requirements

General Statements:

Statement Gen-1

Excision of the tumor with a negative resection margin (R0) is the basis of therapy for all non-advanced breast carcinomas.

LOE 1b, Grade of Recommendation A (Blichert-Toft, M et al. 1998; Renton, SC et al. 1996)

General Statements:

Statement Gen-2

The microscopically measured safety distance between the tumor and the resection margin should be 1 mm or more for invasive carcinom.

GCP (NHMRC 2001; NHSBSP et al. 2003; O'Higgins, N et al. 1998; O'Higgins, N et al. 2006)

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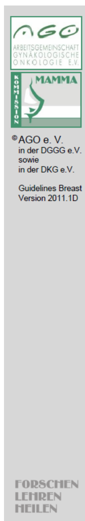
General Statements:

Statement Gen-3

> The microscopically measured safety distance between the tumor and the resection margin should be 5 mm or more for intraductal carcinoma (DCIS).
>
> GCP



Operative Maßnahmen zur Therapie des histologisch gesicherten DCIS

	Oxford LOE	GR	AGO
➤ Histologisch freie Resektionsränder (pR0)	2b	C	++
➤ Multifokalität: BET falls möglich (inkl. RT)	2b	B	+
➤ Nachresektion bei knappem Resektionsrand (≤ 2 mm im Paraffinschnitt)	2b	C	+
➤ Mastektomie (große Läsionen; keine sicheren Ränder im Nachresektat)	2a	B	++
➤ SNE	3b	B	+
➤ Mastektomie	3b	B	+
➤ BET: ≥ 5 cm oder > 2,5 cm+ high grade	3b	B	+/-
➤ Axilladissektion	2b	B	--

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JOURNAL OF CLINICAL ONCOLOGY   ORIGINAL REPORT

Effect of Margin Status on Local Recurrence After Breast Conservation and Radiation Therapy for Ductal Carcinoma In Situ

Clive Dunne, John P. Burke, Monica Morrow, and Malcolm R. Kell

Breast-conserving Therapy:

Statement Gen-4

The objective of surgical treatment is removal of the tumor. Breast-conserving therapy (BCT) with subsequent radiotherapy is equal, with respect to survival, to modified radical mastectomy (MRM) alone.

LOE 1a (EBCTCG 1995; Fisher, B et al. 2002a; Veronesi, U et al. 2002; Wald, NJ et al. 1995; Weaver, DL et al. 2000)

For this reason, all patients should be briefed on the options of breast-conserving therapy (BCT) or modified radical mastectomy (MRM) with the possibility of primary or secondary reconstruction. The patient's preference is decisive.

GCP

Mastectomy:

Statement Gen-5

The following constitute indications for modified radical mastectomy:

– diffuse, extensive calcifications of the malignant type
– multicentricity
– incomplete removal of the tumor (including the intraductal component), even after repeat excision
– inflammatory carcinoma of the breast, possibly following pre-treatment
– likelihood of an unsatisfactory cosmetic result
– postoperative radiotherapy clinically contraindicated after breast-conserving treatment
– informed preference for mastectomy voiced by the patient

LOE 2b, Grade of Recommendation A (Fisher, B et al. 1994; Voogd, AC et al. 2001)

Plastic reconstructive procedures:

Statement Gen-6

Every patient who undergoes a breast amputation should be informed about the possibility of immediate or later breast reconstruction or of not having any reconstructive procedure performed at all; contact to a support group should also be offered.

GCP

Surgical treatment of the axilla:

Statement Gen-7

Determination of the histological node status (pN status) is part of the surgical treatment of invasive breast cancer. It should be performed by means of sentinel node biopsy (SNB)

GCP, Grade of Recommendation A (Kuehn, T et al. 2005; Lyman, GH et al. 2005; Veronesi, U et al. 2003)).

Sentinel node biopsy is equal to axillary dissection with regard to local control. **LOE 1b** (Palesty, JA et al. 2006; Smidt, ML et al. 2005; Veronesi, U et al. 2005a; Zavagno, G et al. 2005)

The morbidity after SNB is significantly reduced compared with axillary dissection. **LOE 1a** (Fleissig, A et al. 2006; Mansel, RE et al. 2006; Veronesi, U et al. 2003)

In patients in whom SNB is not possible or in whom the sentinel node is positive, axillary dissection with removal of at least 10 lymph nodes from levels I and II must be carried out.

GCP

ORIGINAL ARTICLES

Locoregional Recurrence After Sentinel Lymph Node Dissection With or Without Axillary Dissection in Patients With Sentinel Lymph Node Metastases

The American College of Surgeons Oncology Group Z0011 Randomized Trial

Armando E. Giuliano, MD, Linda McCall, MS,† Peter Beitsch, MD,‡ Pat W. Whitworth, MD,§ Peter Blumencranz, MD,¶ A. Marilyn Leitch, MD,‖ Sukamal Saha, MD,** Kelly K. Hunt, MD,†† Monica Morrow, MD,‡‡ and Karla Ballman, PhD§§*

(*Ann Surg* 2010;252: 426–433)

Z0011 Study Design Schema

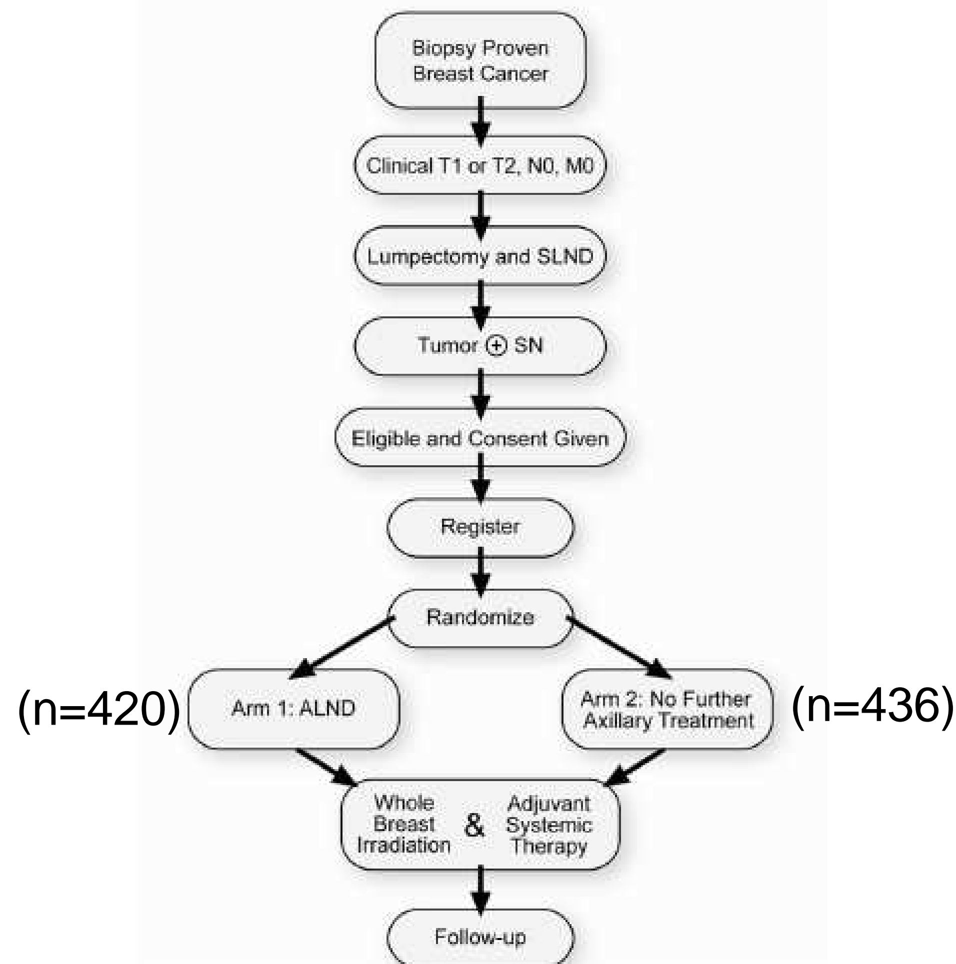

FIGURE 1. Study design showing randomization process.

Local recurrence after BCT:

Statement Rec-1

In patients with an in-breast recurrence (DCIS or invasive carcinoma), the best local tumor control is achieved by secondary mastectomy.

LOE 3b (Borner, M et al. 1994; Dalberg, K et al. 1998)

In patients with a favorable baseline, e.g. patients with DCIS or invasive carcinoma with a long recurrence-free interval, no skin involvement and a large spatial distance between the site of the first tumor and the recurrence, an organ-conserving surgical procedure can be performed in cases where this is deemed justified.

LOE 4, Grade of Recommendation 0 (Deutsch, M 2002; Haffty, BG et al. 1996; Kurtz, JM et al. 1991; Whelan, T et al. 1994)

Patients who undergo organ-conserving surgery must be advised of the associated higher risk for a repeat in-breast recurrence.

GCP

Local recurrence after mastectomy:

Statement Rec-2

An isolated recurrence in the chest wall is to be removed completely by surgery (R0) if possible. LOE 2a, Grade of Recommendation A (Schmoor, C et al. 2000)

Lymph node recurrence:

Statement Rec-3

In patients with an isolated regional recurrence, the therapeutic objective should be to achieve local control of the disease via surgery and/or radiotherapy.

Grade of Recommendation A

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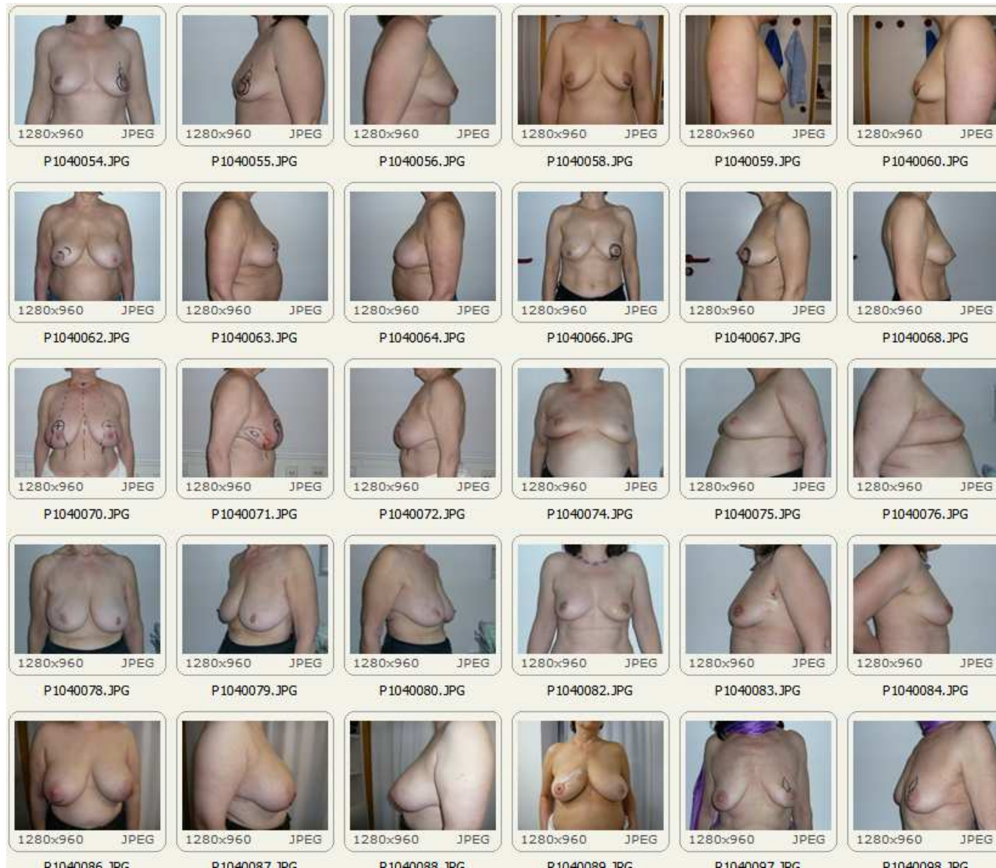

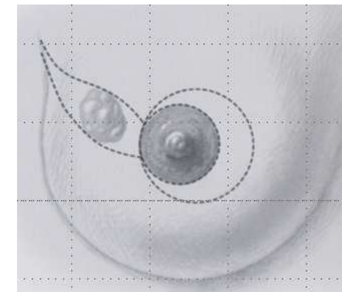

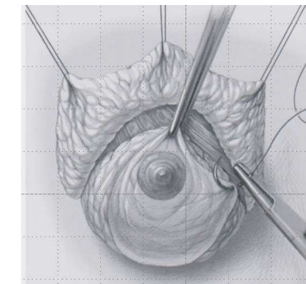

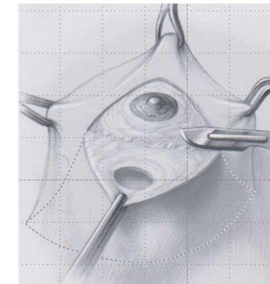

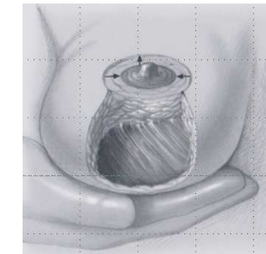

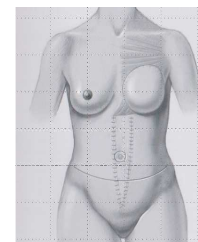

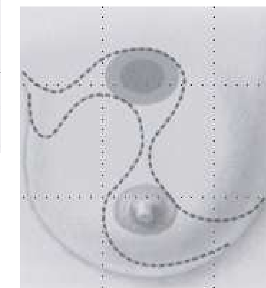

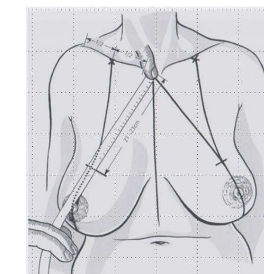

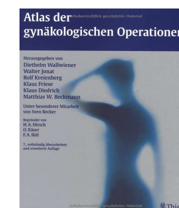

Wallwiener et al.:
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The 3 pillars of surgical approach:

- Oncological safety – follow up is necessary
- Low morbidity – short **and long term**
- Good cosmetic results – don't delay chemo!

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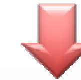
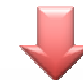
Quality assurance through Benchmarking in Germany 2010:

91% of primary breast cancers were treated in certified breast centers!





			Anzahl / Zähler			Quote			
	Nr.	Kennzahl	min.	max.	Mittel	Soll-vorgabe	min.	max.	Mittel
wire marking non palpable	14	Platzierung präoperative Drahtmarkierung	2	345	68,9	≥ 95%	20,3%	100%	95,4%
Primary breast cancers	16	Primärfälle Mammakarzinom	37	597	198,4	-----			-----
BCT pT1	17	Brusterhaltendes Vorgehen bei pT1	6	238	77,0	> 70%	47,9%	100%	86,1%
Mastectomy as first procedure	18	Ablatio mammae als Ersteingriff	6	217	41,4	< 30%	7,7%	51,4%	22,2%
pTis as first procedure	19	pTis bei Ersteingriff	1	89	21,1	> 10%	1,1%	23,8%	10,7%
Determination of nodal status (invasive cancer)	20	Bestimmung Nodalstatus bei invasivem Mammakarzinom	33	454	158,8	> 95%	80,1%	100%	96,1%

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		Anzahl / Zähler			Quote			
Nr.	Kennzahl	min.	max.	Mittel	Soll-vorgabe	min.	max.	Mittel
21	Alleinige Sentinellymphknoten-Entfernung (SLNE) bei pT1 u. pN0	6	215	61,6	≥ 75%	28,6%	100%	88,2%
22	Intraoperative Präparateradio-/-sonographie	3	477	68,2	> 95%	20,9%	100%	95,7%
23	Revisionsoperationen	0	42	5,7	< 5%	0,0%	10,3%	2,5%
24	Postoperative Wundinfektionen	0	28	3,9	< 5%	0,0%	8,9%	1,7%
25	Brustrekonstruktion	0	401	47,0	-----			-----
26	Angabe von Resektionsrand und Sicherheitsabstand	32	582	183,4	100%	79,6%	100%	99,2%

Sole SNB on pT1 and pN0

Intraoperative specimen sono- or radiography non palpable

Secondary surgery/complications

Postoperative wound infection

Description of free margins

Summary:

The 3 pillars of surgical approach:

- Oncological safety
- Low morbidity
- Good cosmetic results

Find out what your patient wants and needs

and then balance it out!

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Thank you!

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