



# Annual Report 2017

## of the Certified Breast Cancer Centres (BCCs)

Audit year 2016 / indicator year 2015



**Deutsche Gesellschaft für Senologie**

(German Society for Senology)

**DKG**   
GERMAN CANCER SOCIETY  
Certification

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## General information

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### Quality indicators of the guidelines (LL QI):

In the table of contents and in the respective headings the indicators, which correspond to the quality indicators of the evidence-based guidelines are specifically identified. The quality indicators identified in this way are based on the strong recommendations of the guidelines and were derived from the guidelines groups of the guidelines programme oncology. Further information: [www.leitlinienprogramm-onkologie.de/English-Language](http://www.leitlinienprogramm-onkologie.de/English-Language)

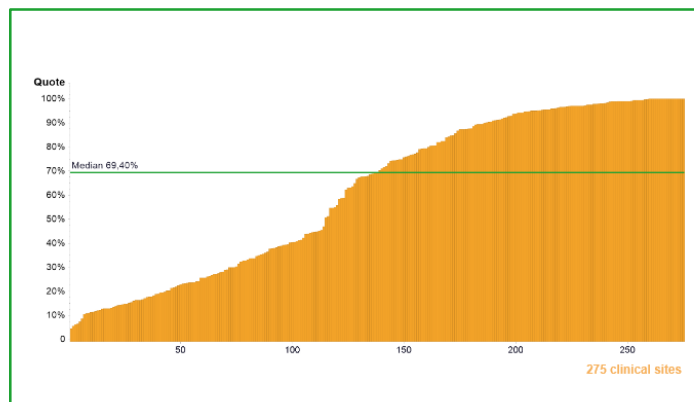
	Definition of indicator	All clinical sites 2014	
		Median	Range
Numerator	All surgically treated primary cases presented in the tumour conference	151*	46 - 801
Population	Surgically treated primary cases (for definition of a primary case see 5.2.1)	152*	46 - 806
Rate	Target ≥ 95%	100%	93.75% - 100%

### Basic data indicator:

The definitions of numerator, population (= denominator) and target value are taken from the Indicator sheet.

The medians for numerator and population do not refer to an existing centre but indicate the median of all cohort numerators and the median of all cohort denominators.

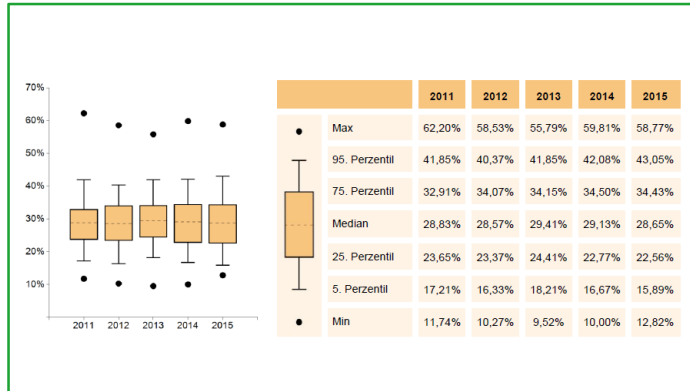
The values for the numerators, populations and rates of all centres are given under range.



### Chart:

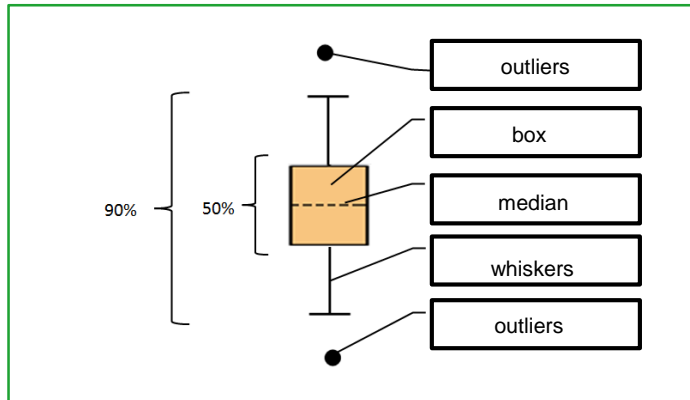
The x-axis indicates the number of centres, the y-axis gives the values in percent or number (e.g. primary cases). The target is depicted as a horizontal orange line. The median, a horizontal orange line, divides the entire group into two equal halves.

## General information



### Cohort development:

The cohort development in the years **2011, 2012, 2013, 2014** and **2015** is presented in a box plot diagram.



### Boxplot:

A box plot consists of a **box with median, whiskers** and **outliers**. 50 percent of the Centres are within the box. The median divides the entire available cohort into two halves with an equal number of Centres. The whiskers and the box encompass a 90<sup>th</sup> percentile area/range. The extreme values are depicted here as dots.

## Status of the certification system: Breast Cancer Centres 2016

	31.12.2016	31.12.2015	31.12.2014	31.12.2013	31.12.2012
Ongoing procedures	4	2	4	2	6
Certified centres	230	228	224	218	212
Certified clinical sites	280	279	277	274	267
BCC with 1 clinical site	186	183	177	169	163
2 clinical sites	40	41	43	44	45
3 clinical sites	2	2	2	3	2
4 clinical sites	2	2	2	2	2

## Included clinical sites

	31.12.2016	31.12.2015	31.12.2014	31.12.2013	31.12.2012
Clinical sites included in the Annual Report	275	275	273	268	256
Equivalent to	98.2%	98.6%	98.6%	97.8%	95.9%
Primary cases total*	53,837	52,965	52,904	50,195	48,608
Primary cases per centre (mean)*	196	193	194	187	190
Primary cases per centre (median)*	177	169	172	170,5	166

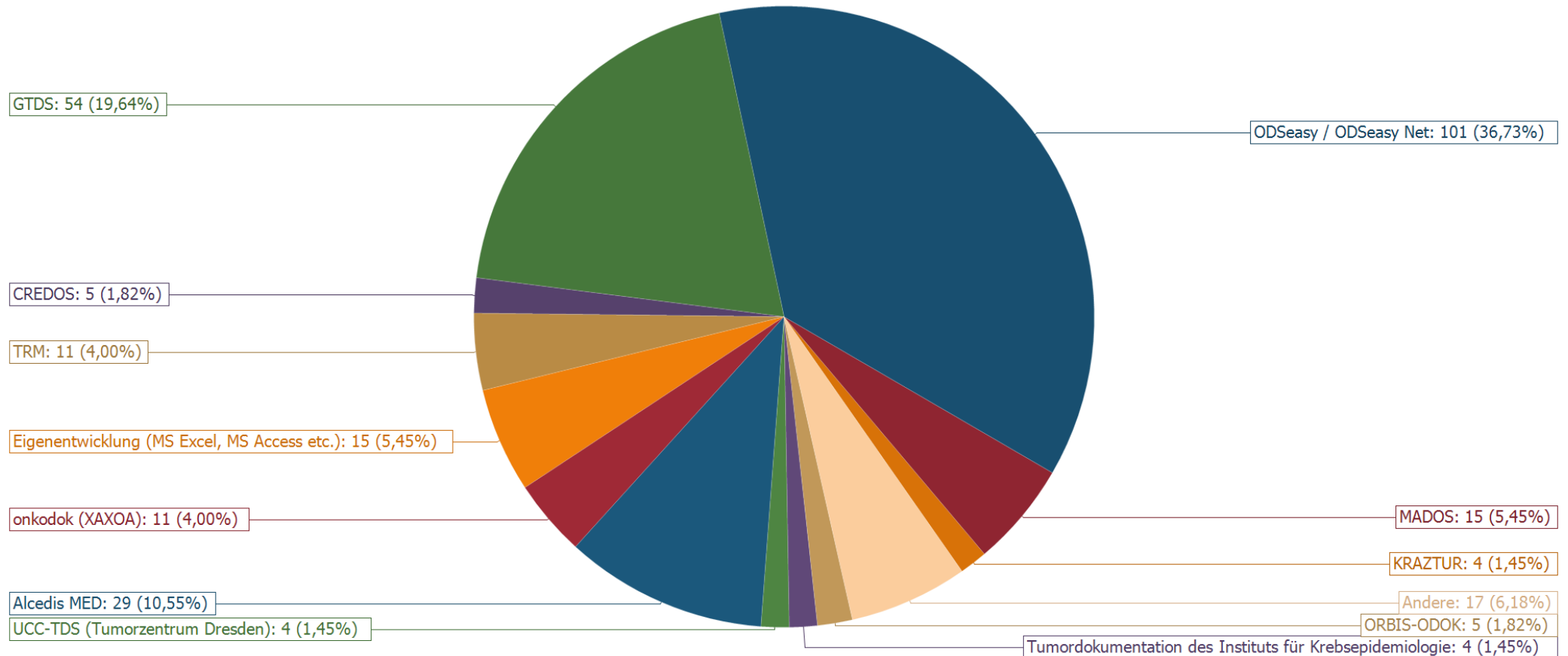
\*The figures are based on the clinical sites listed in the Annual Report.

This Annual Report considers the Breast Cancer Centres (BCCs) certified in the Certification System of the German Cancer Society. The Indicator Sheet, which is part of the Catalogue of Requirements (Catalogue of Requirements Certification), is the basis for the diagrams.

The Annual Report covers 275 of the 280 clinical sites. Three clinical sites have not been included because they were certified for the first time in 2016 (data depiction of a full calendar year is not mandatory for initial certification) and for two clinical sites certificates were suspended (no audit in 2016). [www.oncomap.de](http://www.oncomap.de) provides an updated overview of all certified centres.

The indicators published herein refer to the indicator year 2015. They are the basis for the audits conducted in 2016.

## Tumour documentation systems used in BCCs

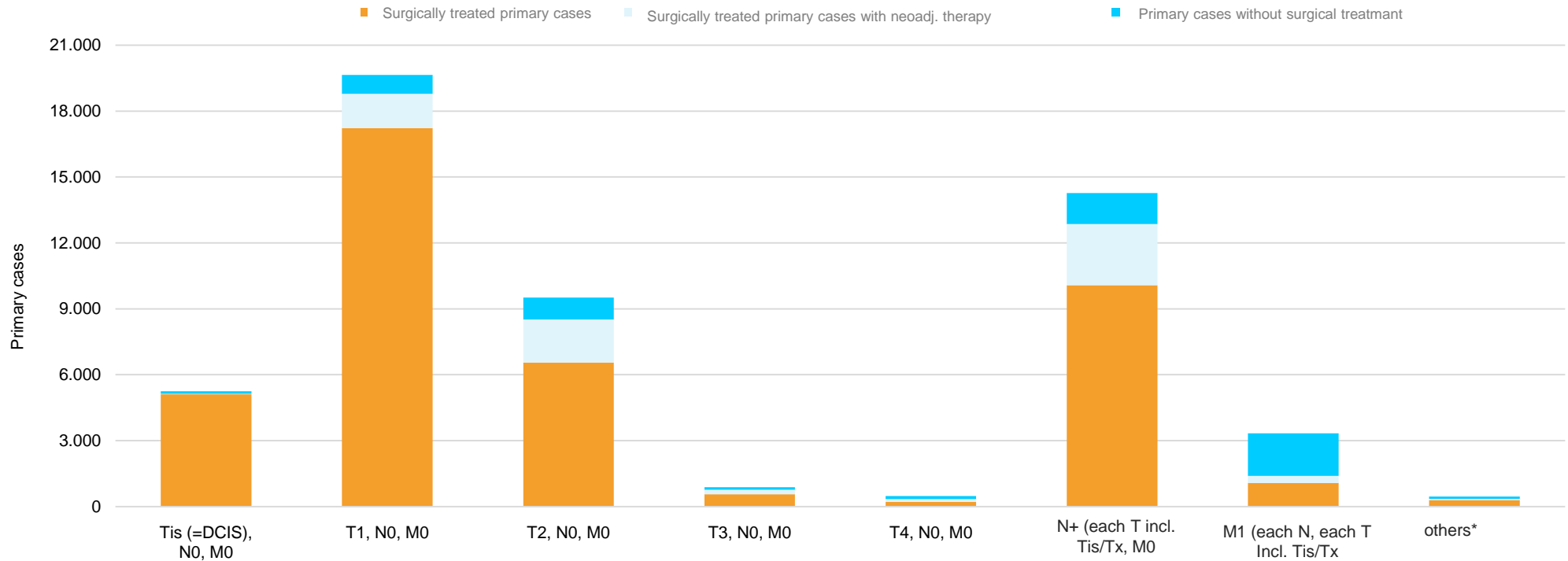


The details on the tumour documentation system were taken from the EXCEL annex to the Indicator Sheet (spreadsheet basic data). It is not possible to indicate several systems. In many cases support is provided by the cancer registers or there may be a direct connection to the cancer register via a specific tumour documentation system.

Legende:	
Others	System used in ≤ 4 clinical sites



## Basic data – Primary cases BC

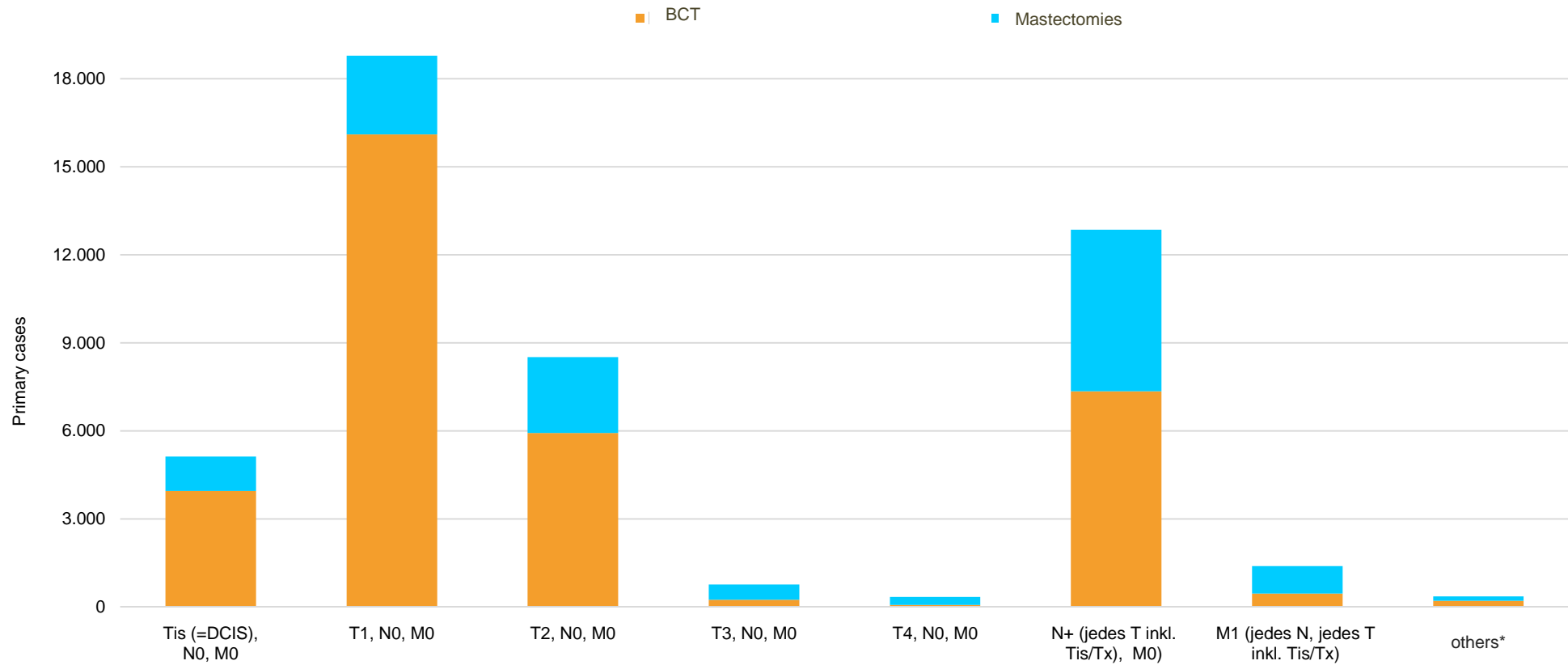


	Tis (=DCIS), NO, MO	T1, NO, MO	T2, NO, MO	T3, NO, MO	T4, NO, MO	N+ (each T incl. Tis/Tx), MO)	M1 (each N, each T inkl. Tis/Tx)	Not assignable*	Total
<b>Primary cases without surgical treatment</b>	125 (2.38%)	860 (4.38%)	996 (10.47%)	117 (13.28%)	136 (28.57%)	1,409 (9.87%)	1,944 (58.24%)	104 (22.61%)	5,691
<b>Surgically treated primary cases after neoadj. therapy</b>	22 (0.42%)	1,557 (7.92%)	1,961 (20.62%)	200 (22.70%)	123 (25.84%)	2,788 (19.54%)	321 (9.62%)	64 (13.91%)	7,036
<b>Surgically treated primary cases</b>	5,106 (97.20%)	17,233 (87.70%)	6,553 (68.91%)	564 (64.02%)	217 (45.59%)	10,072 (70.59%)	1,073 (32.14%)	292 (63.48%)	41,110
<b>Total primary cases</b>	5,253	19,650	9,510	881	476	14,269	3,338	460	53,837

\*others: e.g. T1, N0, Mx



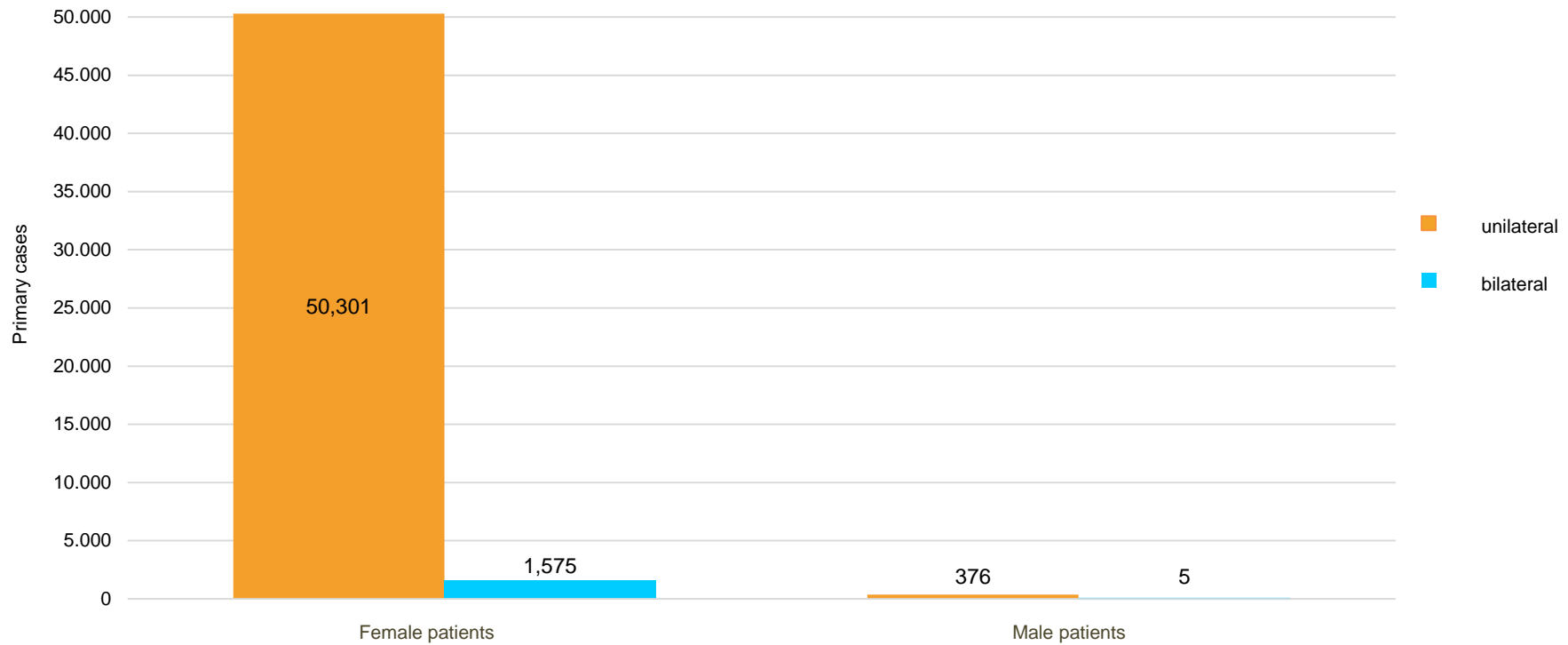
## Basic data – Distribution of surgically treated primary cases



	Tis (=DCIS), N0, M0	T1, N0, M0	T2, N0, M0	T3, N0, M0	T4, N0, M0	N+ (jedes T inkl. Tis/Tx), M0	M1 (jedes N, jedes T inkl. Tis/Tx)	Not assignable*	Total
<b>Mastectomies</b>	1,176 (22.93%)	2,689 (14.31%)	2,591 (30.43%)	523 (68.46%)	272 (80.00%)	5,513 (42.87%)	936 (67.14%)	147 (41.29%)	13,847
<b>BCT</b>	3,952 (77.07%)	16,101 (85.69%)	5,923 (69.57%)	241 (31.54%)	68 (20.00%)	7,347 (57.13%)	458 (32.86%)	209 (58.71%)	34,299
<b>Total primary cases</b>	5,128	18,790	8,514	764	340	12,860	1,394	356	48,146

\*others: e.g. T1, N0, Mx

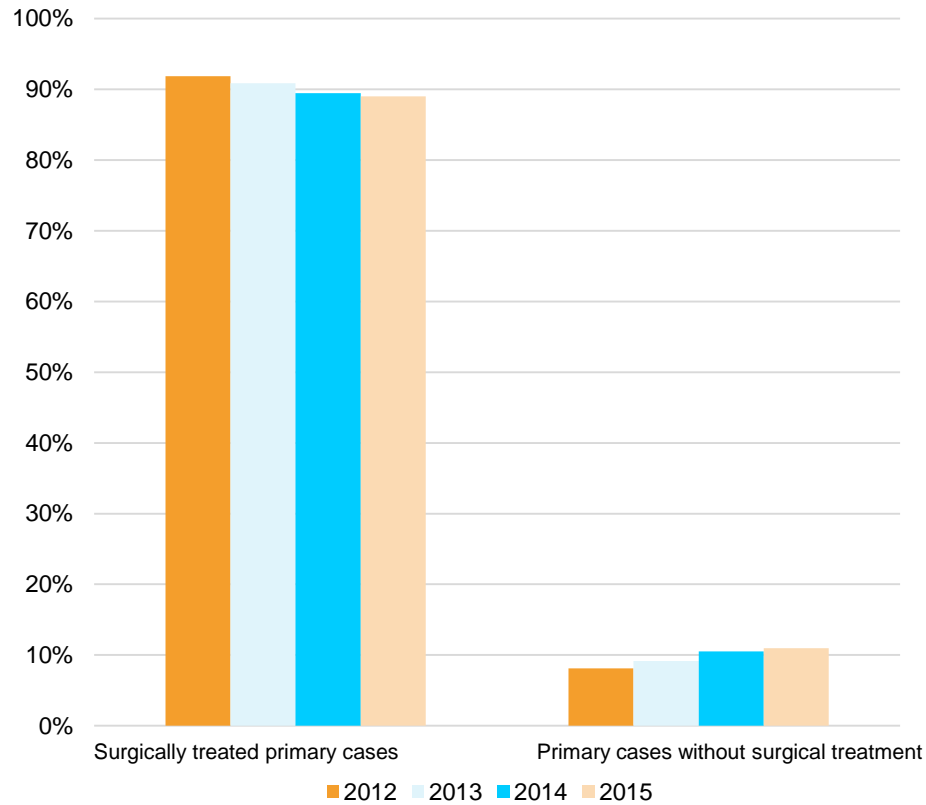
## Basic data – Gender



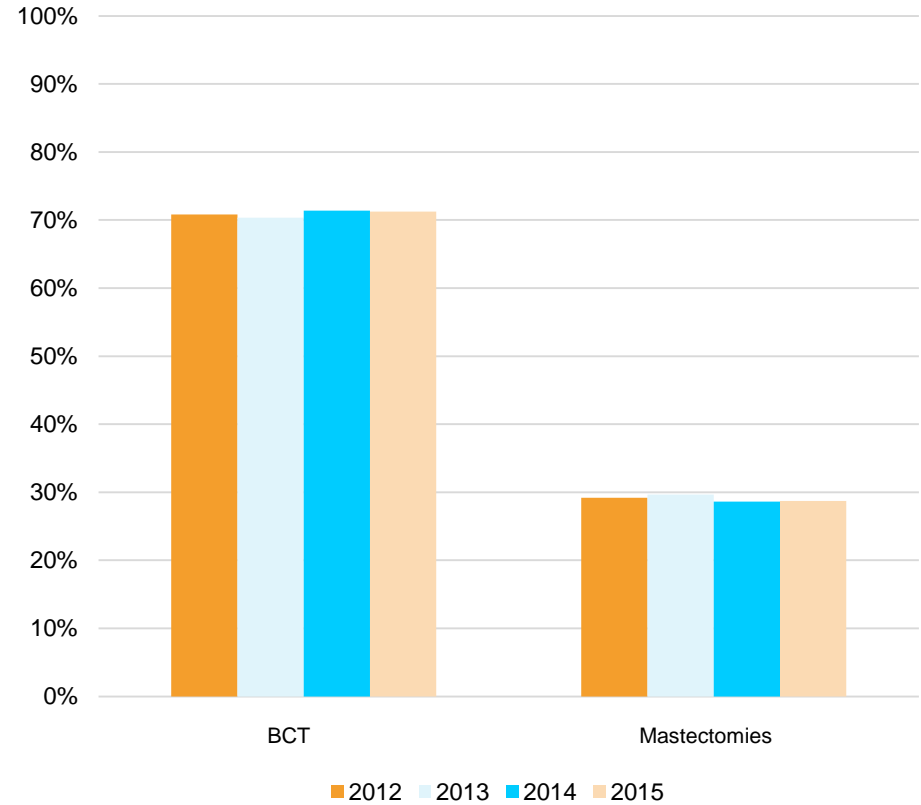
	Female patients	Male Patients	Total primary cases
<b>unilateral</b>	50,301 (96.96%)	376 (98.69%)	50,677
<b>bilateral (simultaneous)</b>	1,575 (3.04%)	5 (1.31%)	3,160
			53,837
<b>Total</b>	51,876	381	

## Basic data – Development 2012 - 2015

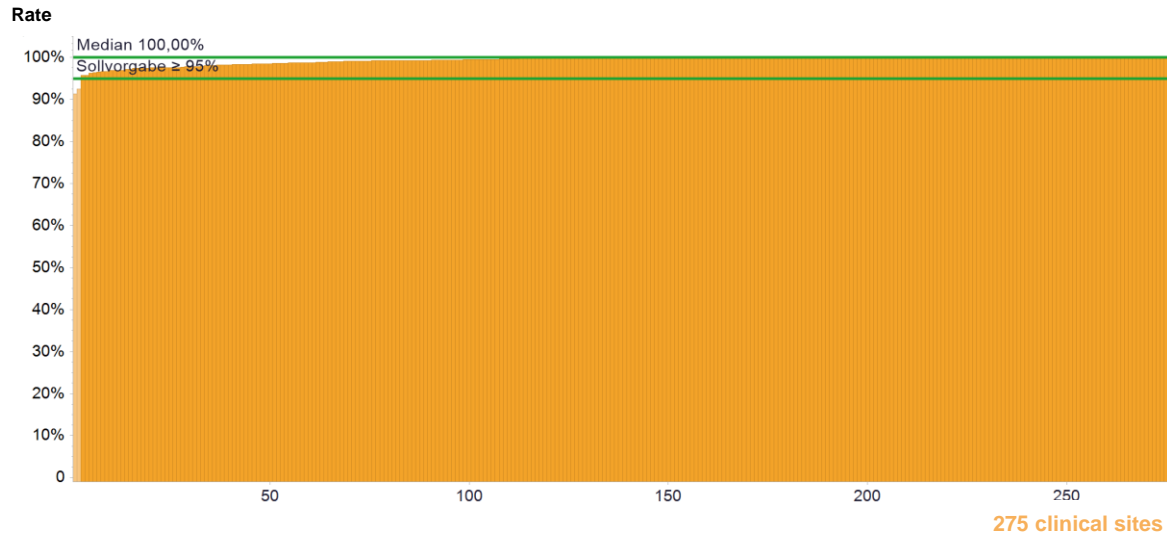
**Distribution of primary cases with and without surgical treatment from 2012-2015**



**Distribution of surgically treated primary cases 2012-2015**

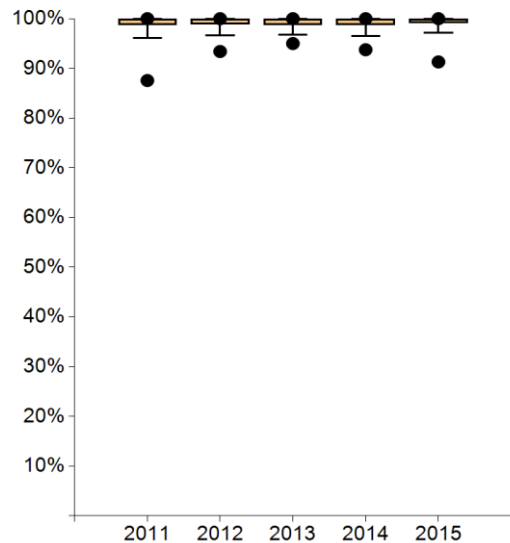


# 1. Postoperative case presentation



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	All surgically treated primary cases presented in the tumour board	156*	42 - 803
Denominator	Surgically treated primary cases (for definition of a primary case see 5.2.1)	156*	45 - 803
Rate	Target value ≥ 95%	100%	91.30% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



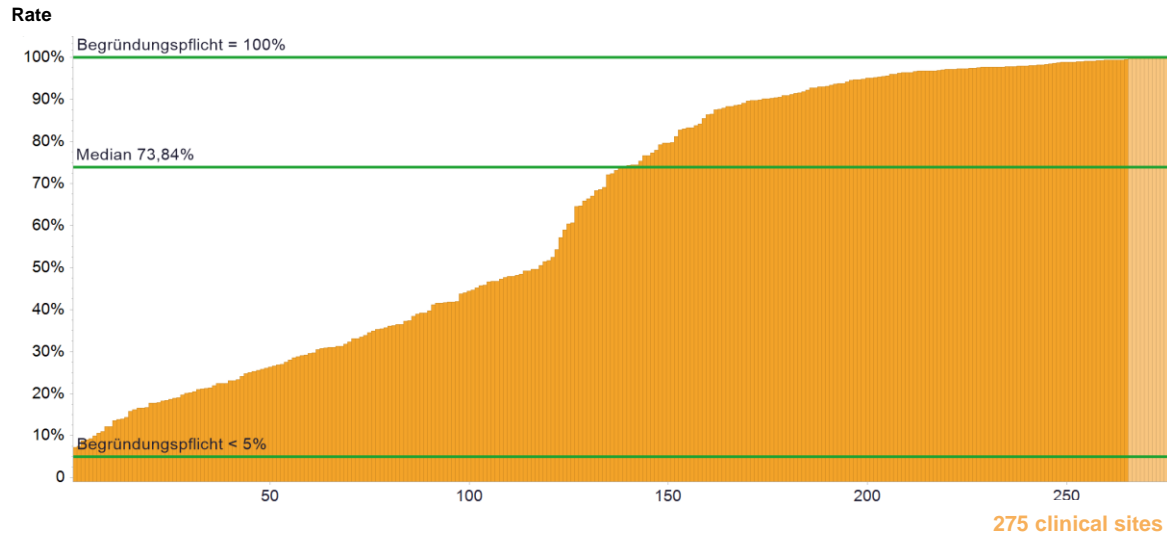
	2011	2012	2013	2014	2015
● Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25 <sup>th</sup> percentile	98.72%	98.93%	98.69%	98.76%	99.11%
5 <sup>th</sup> percentile	96.10%	96.67%	96.77%	96.55%	97.20%
● Min	87.56%	93.40%	95.00%	93.75%	91.30%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	273	99.27%

### Comment

There has been very good implementation of the indicator over time. As reported last year, only two centres did not meet the target. The reason they gave was that the postoperative treatment had already been discussed during the preoperative case presentation.

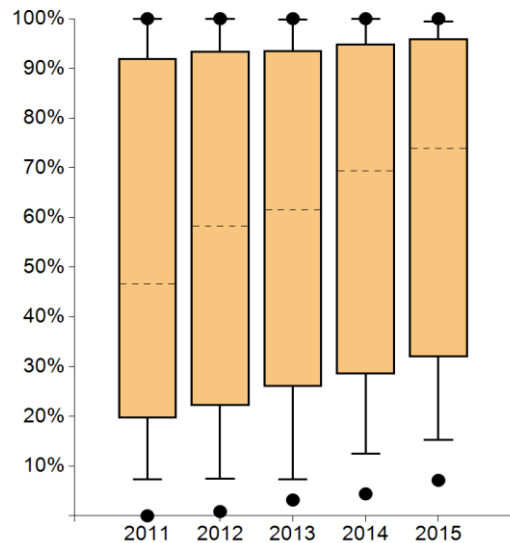
## 2. Pretreatment case presentation



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Number of primary cases presented in the pre-therapeutic tumour board	98*	4 - 668
Denominator	Primary cases	177*	50 - 891
Rate	Mandatory statement of reason** <5% and =100%	73.84%	7.14% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

\*\* For values outside the plausibility limit(s) the Centres must give the reasons.



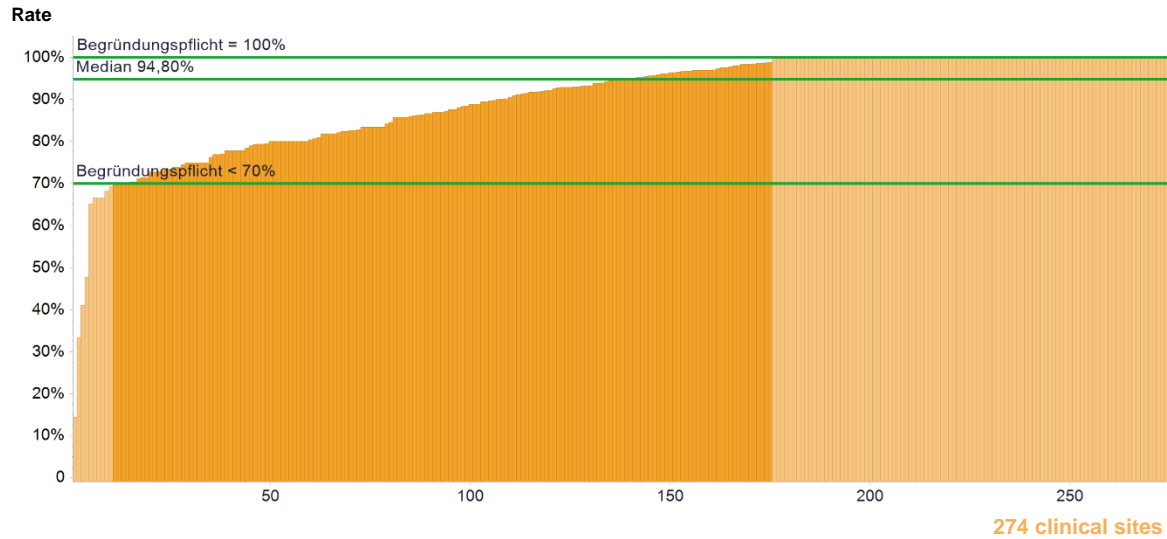
	2011	2012	2013	2014	2015
● Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	99.77%	100%	99.41%
75 <sup>th</sup> percentile	91.98%	93.41%	93.63%	94.90%	96.02%
Median	46.67%	58.26%	61.60%	69.40%	73.84%
25 <sup>th</sup> percentile	19.63%	22.19%	25.97%	28.47%	32.00%
5 <sup>th</sup> percentile	7.39%	7.39%	7.26%	12.47%	15.33%
● Min	0.00%	0.85%	3.18%	4.41%	7.14%

Clinical sites with evaluable data		Clinical sites meeting the plausibility limit	
Number	%	Number	%
275	100.00%	265	96,36%

### Comment

The median has improved continuously over time (169 centres with increasing/unchanged very high pre-therapeutic presentation rates). Centres with the lowest rates last year have improved their rates. Explanations for low rates included the fact that only patients with neoadjuvant therapy were presented to the tumour board, as well as that screening of patients had already been discussed at the screening tumour board and were not discussed again at the centre.

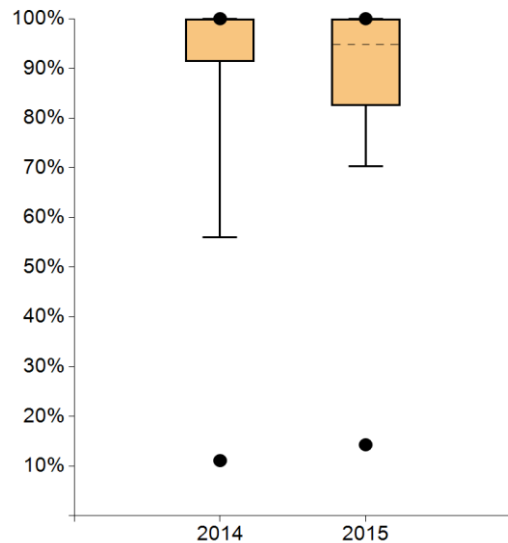
### 3. Case discussion of local recurrence/metastases



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Number of cases with local recurrence/newly diagnosed metastases presented in the tumour board	21*	1 - 184
Denominator	Patients with first local recurrence and/or newly diagnosed metastases (excluding patients with metastases at initial presentation)	24*	2 - 186
Rate	Mandatory statement of reasons** <70% and =100%	94.80%	14.29% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

\*\* For values outside the plausibility limit(s) the Centres must give the reasons.



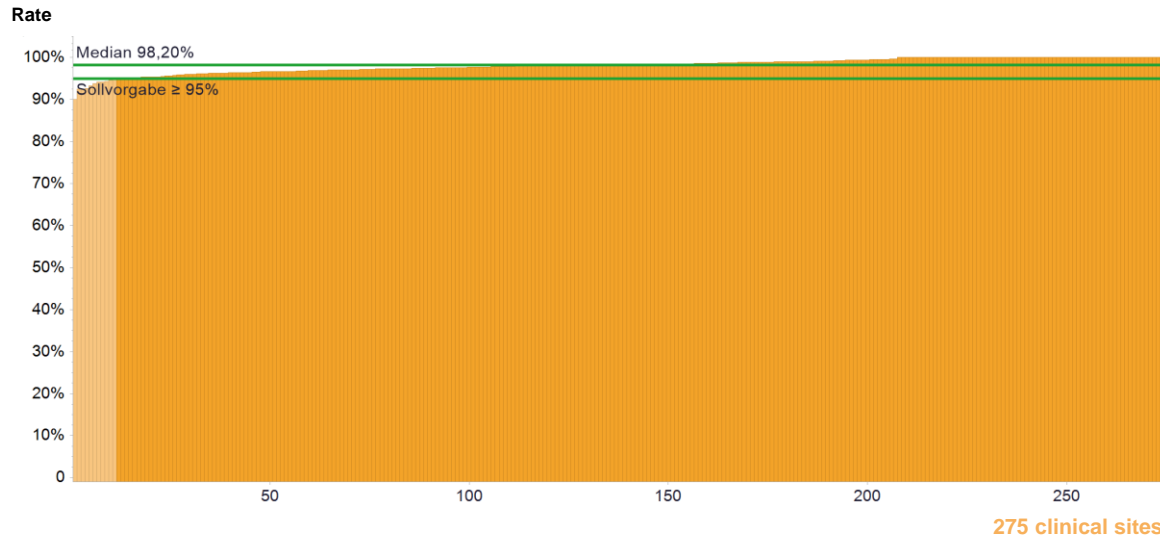
	2011	2012	2013	2014	2015
Max	----	----	----	100%	100%
95 <sup>th</sup> percentile	----	----	----	100%	100%
75 <sup>th</sup> percentile	----	----	----	100%	100%
Median	----	----	----	100%	94.80%
25 <sup>th</sup> percentile	----	----	----	91.37%	82.42%
5 <sup>th</sup> percentile	----	----	----	56.04%	70.34%
Min	----	----	----	11.11%	14.29%

Clinical sites with evaluable data		Clinical sites meeting the plausibility limit	
Number	%	Number	%
274	99.64%	165	60,22%

**Comment**

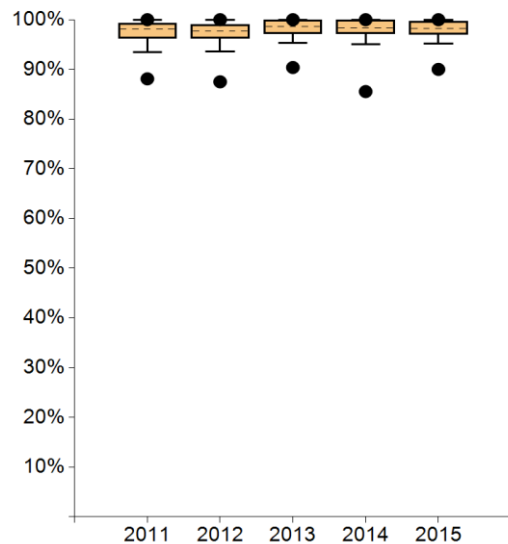
The indicator is well implemented in the centres. Centres with the lowest rates last year have increased their rates. The reasons for missing case discussions were secondary distant metastases in the patient that were treated in a different hospital, or referral to practitioners or other departments as a result of which patients were not presented to the tumour board of the certified centres. As an action, it was agreed that cooperation with private practitioners and other clinics would be improved.

### 4.1. Recommended RT after breast conserving therapy in cases of inv. BC (indicator year) (QI 6)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Primary cases with inv. breast cancer and breast conserving therapy, in which a radiotherapy was recommended	93*	25 - 540
Denominator	Primary cases with invasive breast cancer with BCT (excluding patients with metastases at initial presentation)	95*	27 - 542
Rate	Target value ≥ 95%	98.20%	90.00% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	99.22%	99.08%	100%	100%	99.67%
Median	98.15%	97.75%	98.59%	98.33%	98.20%
25 <sup>th</sup> percentile	96.28%	96.20%	97.18%	97.11%	97.08%
5 <sup>th</sup> percentile	93.51%	93.58%	95.25%	95.05%	95.18%
Min	88.10%	87.50%	90.38%	85.54%	90.00%

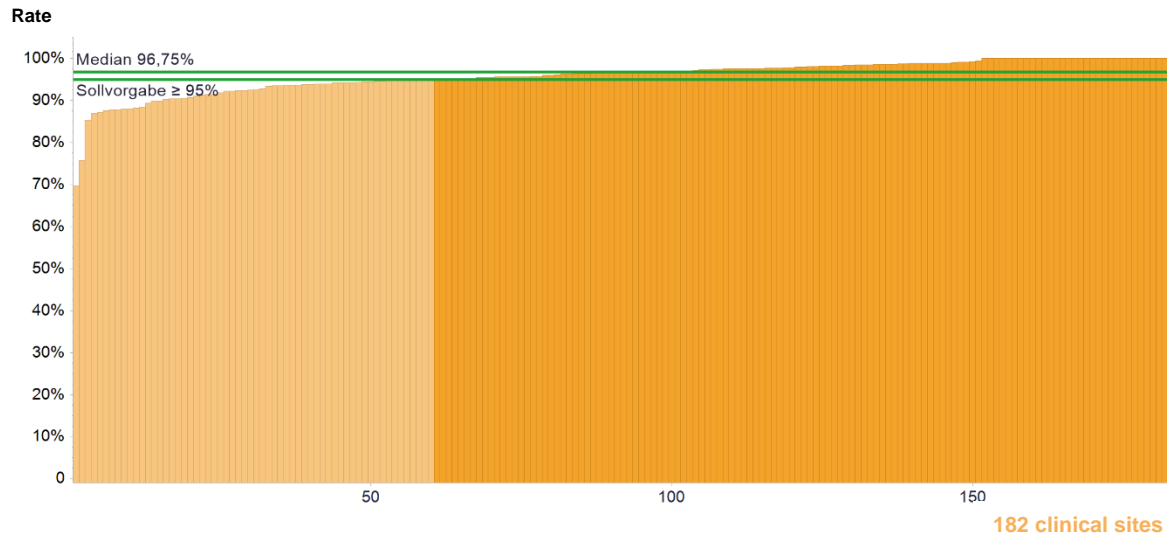
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	264	96,00%

**Comment**

The recommended RT rate has increased compared to last year (153 centres with increased/unchanged very high recommended RT rate vs. 117 centres with decreased recommended RT rate). The reasons given by the lowest performing centres for not meeting the target were: existing comorbidities or elderly patients and/or overall poor general state of health.

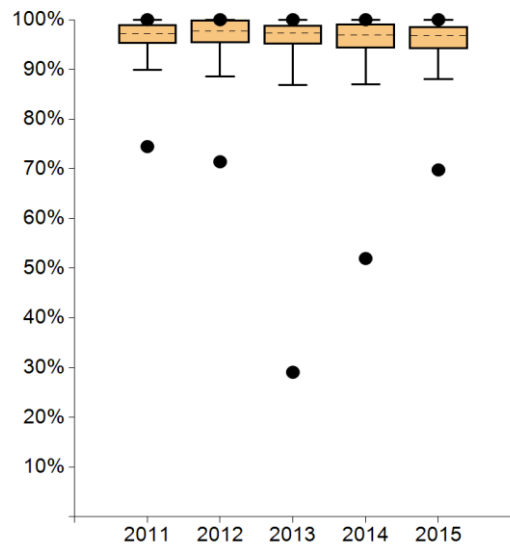


## 4.2. Completed RT after breast conserving therapy in cases of inv. BC (based on year previous to indicator year)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Primary cases with inv. breast cancer and BCT, for which radiotherapy was recommended and performed	86.5*	15 – 286
Denominator	Numerator for indicator no. 4.1 for the year previous to indicator year (excluding patients with metastases at initial presentation)	90*	16 – 300
Rate	Target value ≥ 95%	96.75%	69.78% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



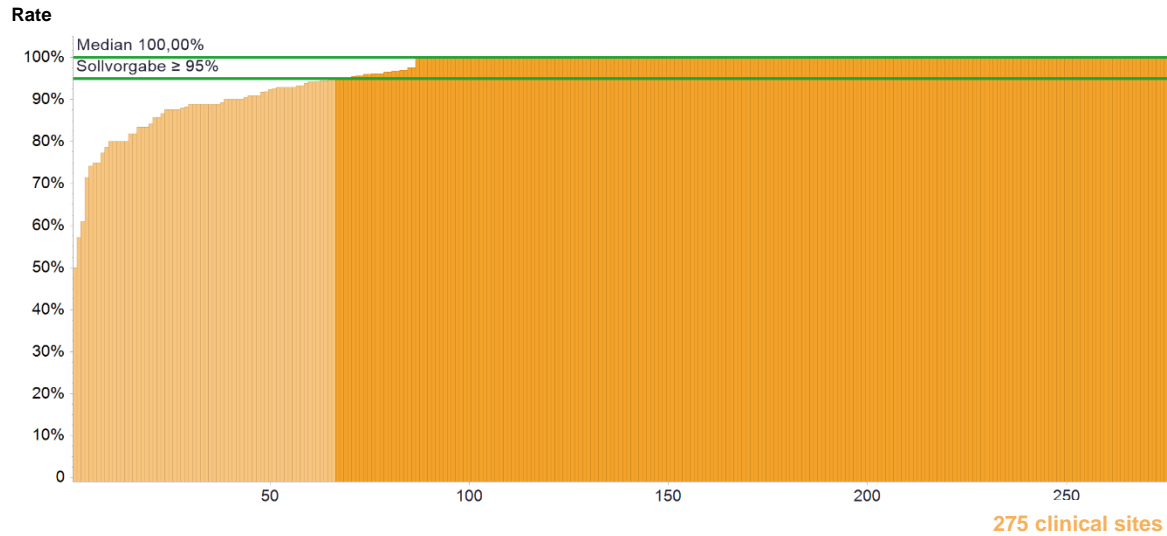
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	98.98%	100%	98.93%	99.13%	98.64%
Median	97.10%	97.70%	97.28%	96.88%	96.75%
25 <sup>th</sup> percentile	95.24%	95.27%	94.99%	94.31%	94.15%
5 <sup>th</sup> percentile	89.86%	88.54%	86.90%	86.97%	88.01%
Min	74.47%	71.42%	29.08%	51.96%	69.78%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
182	66.18%	122	67.03%

### Comment

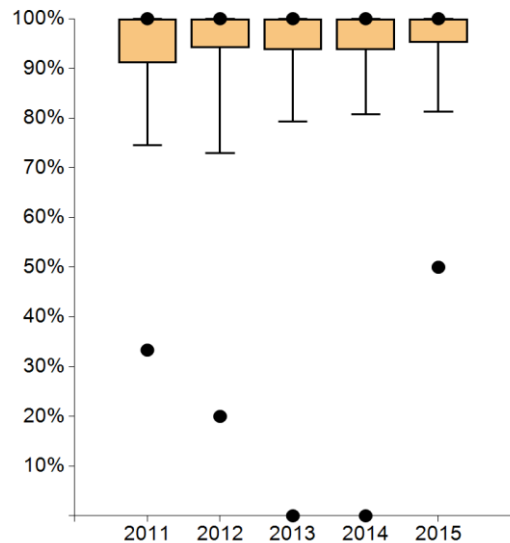
The following x.2 indicators record if patients received the therapy (here: RT) as recommended in the x.1 indicators. Therefore, the population of patients corresponds to the numbers for the previous year numbers. This indicator is reported on a voluntary basis; nevertheless data were received from 182 centres (=66%). The reasons given for non-conduct were: refusal by patients, treatment performed by radiotherapists who were not cooperation partners of the centre, death of the patient and/or occurrence of second cancer.

## 5.1. Recommended RT after breast conserving therapy in cases of DCIS (indicator year)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Primary cases with DCIS and BCT for which radiotherapy was recommended	12*	1 - 77
Denominator	Primary cases with DCIS und BCT	12*	1 - 77
Rate	Target value ≥ 95%	100%	50,00% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25 <sup>th</sup> percentile	91.11%	94.11%	93.75%	93.75%	95.24%
5 <sup>th</sup> percentile	74.50%	72.96%	79.30%	80.70%	81.27%
Min	33.33%	20.00%	0.00%	0.00%	50.00%

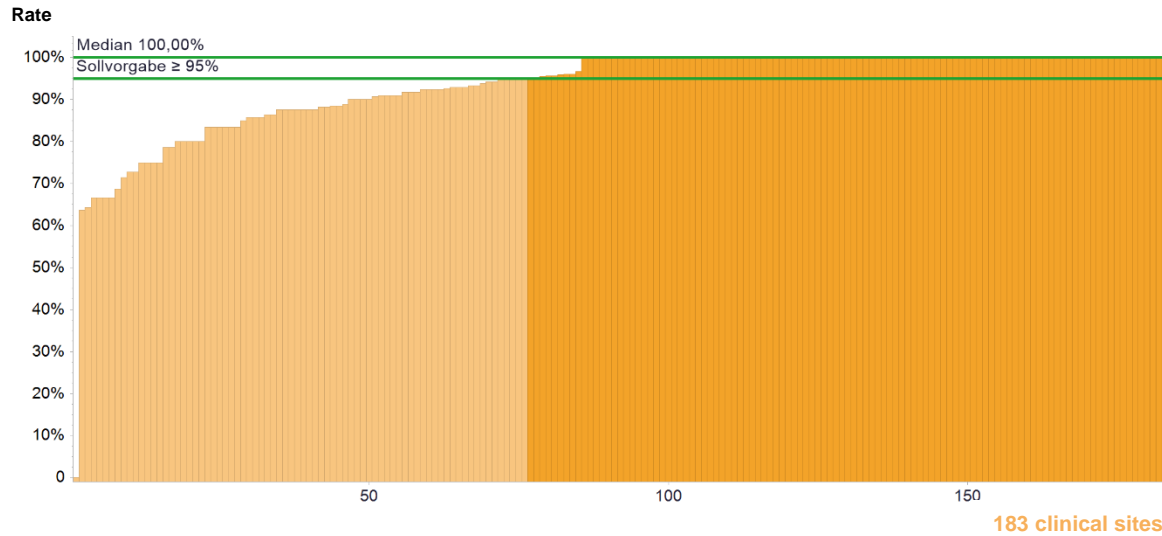
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100,00%	209	76,00%

### Comment

Reasons for non-recommendation included: low-grade DCIS <1cm, patients' age, synchronous tumours of other entities, mastectomy recommended.

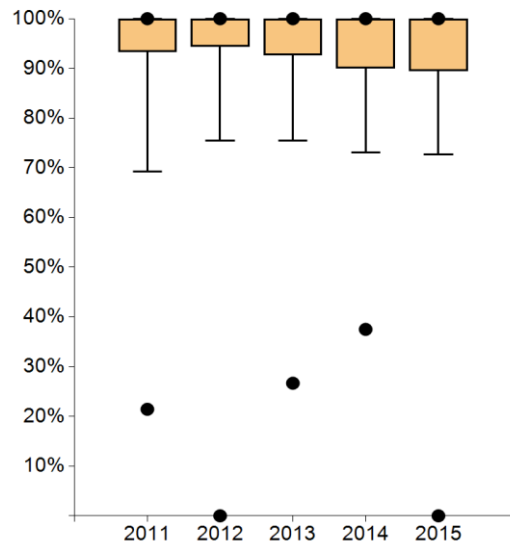
The auditors checked all explanations and confirmed them. In comparison to last year, the recommendation rate has improved in most centres or remained unchanged at 100% (206 vs. 63 centres).

**5.2. Completed radiotherapy after breast conserving therapy in cases of DCIS (based on year previous to indicator year)**



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Primary cases with DCIS and BCT that were treated with radiotherapy	10*	0 - 51
Denominator	Numerator for indicator no. 5.1 for the year previous to indicator year	11*	1 - 59
Rate	Target value ≥ 95%	100%	0.00% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



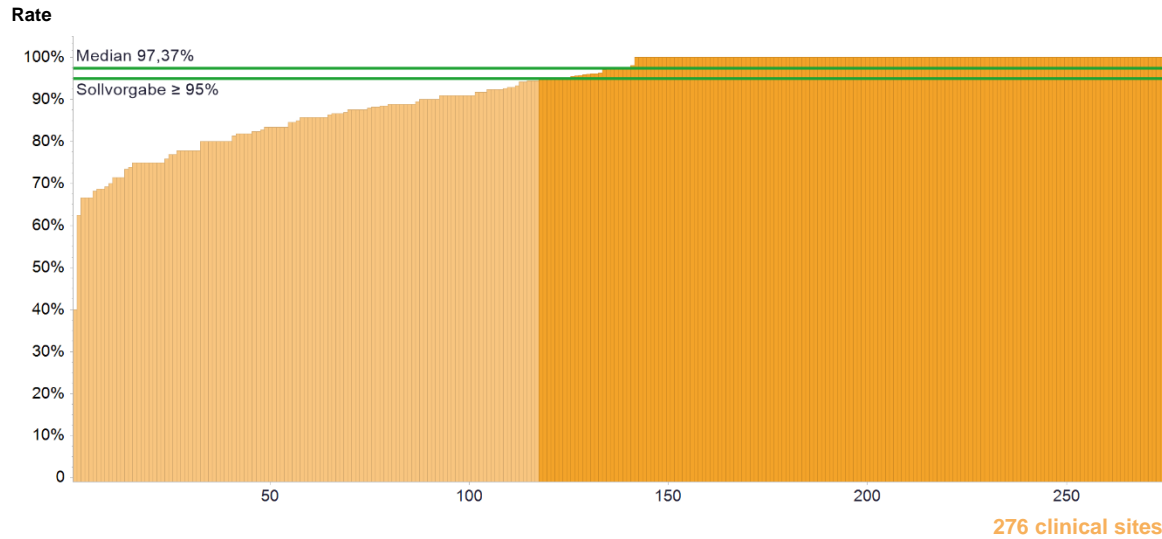
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25 <sup>th</sup> percentile	93.33%	94.44%	92.72%	90.00%	89.45%
5 <sup>th</sup> percentile	69.27%	75.42%	75.42%	73.05%	72.73%
Min	21.43%	0.00%	26.67%	37.50%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
183	66.55%	107	58.47%

**Comment**

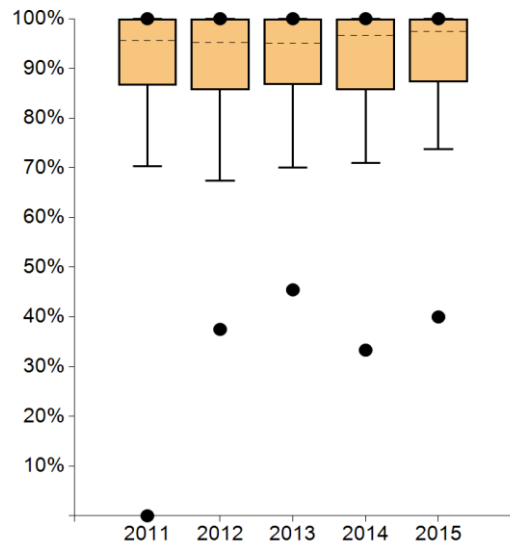
See also indicator 4.2  
Reasons for not performing RT included: patient rejected therapy, RT was conducted outside the centre and no information was shared.  
The centre with the lowest value (=0%) also had the smallest population (=1).

## 6.1. Recommended RT after a mastectomy in cases of inv. BC (indicator year) (QI 10)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Primary cases with invasive breast cancer and mastectomy, for which radiotherapy was recommended	11*	1 - 67
Denominator	Primary cases with invasive breast cancer und mastectomy and indication for radiotherapy of the chest wall (T3/4-Tm, R1/R2 resection with no possibility of repeated resection or pN +> 3 LN) (excluding patients with metastases at initial presentation)	11*	1 - 70
Rate	Target value ≥ 95%	97.37%	40.00% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



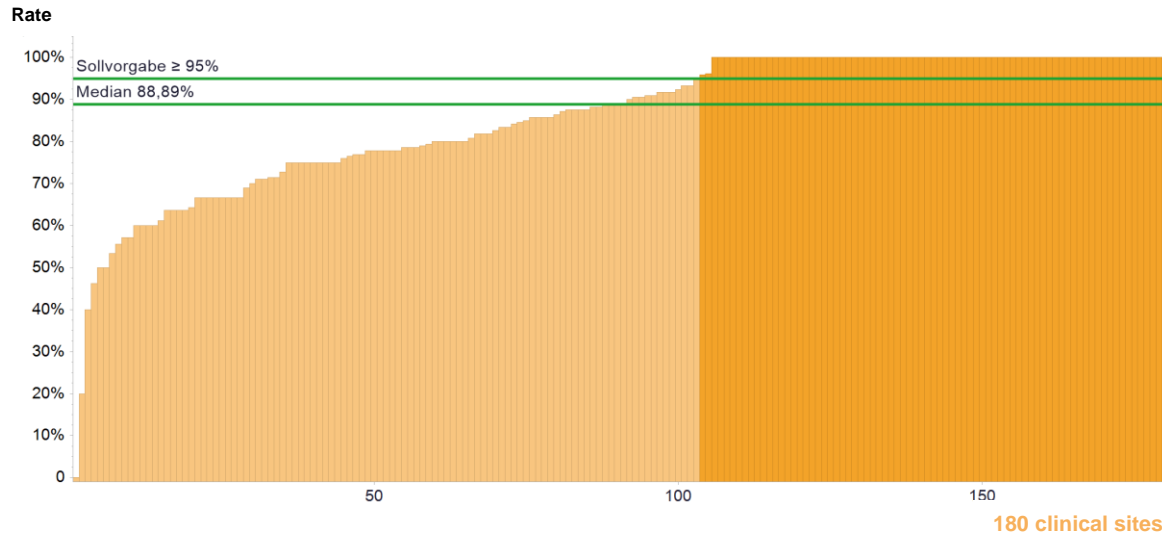
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	100%	100%	100%	100%	100%
Median	95.55%	95.23%	95.00%	96.61%	97.37%
25 <sup>th</sup> percentile	86.59%	85.71%	86.67%	85.71%	87.23%
5 <sup>th</sup> percentile	70.24%	67.39%	70.00%	71.00%	73.74%
Min	0.00%	37.50%	45.45%	33.33%	40.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	158	57.45%

### Comment

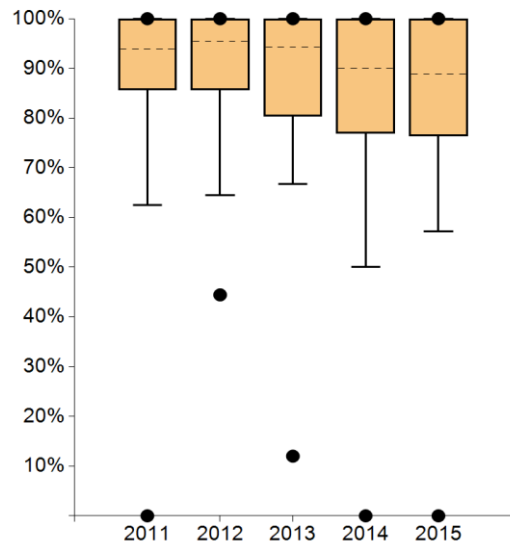
The median of the indicator has increased slightly. The rate of recommendations for RT after mastectomy in cases of inv. BC increased slightly or remained unchanged at 100% in most of the centres (186 vs. 84 centres) in comparison with the previous year. The reasons given for non-recommendation were: patients' age and existing comorbidities. Furthermore, it was reported that occasionally the recommendation was not given if only 1 of the 3 criteria were applicable. In these cases the auditors discussed the QI with the centres.

**6.2. Completed radiotherapy after a mastectomy in cases of inv. BC (in relation to the previous indicator year)**



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Primary cases with invasive breast cancer and mastectomy, for which there was an indication for radiotherapy of the chest wall (= T3/4-Tm, R1/R2-resection without an option of repeated resection or pN +> 3 LN) and on whom radiotherapy was performed	9*	0 - 38
Denominator	Numerator for indicator no. 6.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	11*	2 - 47
Rate	Target value ≥ 95%	88.89%	0.00% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



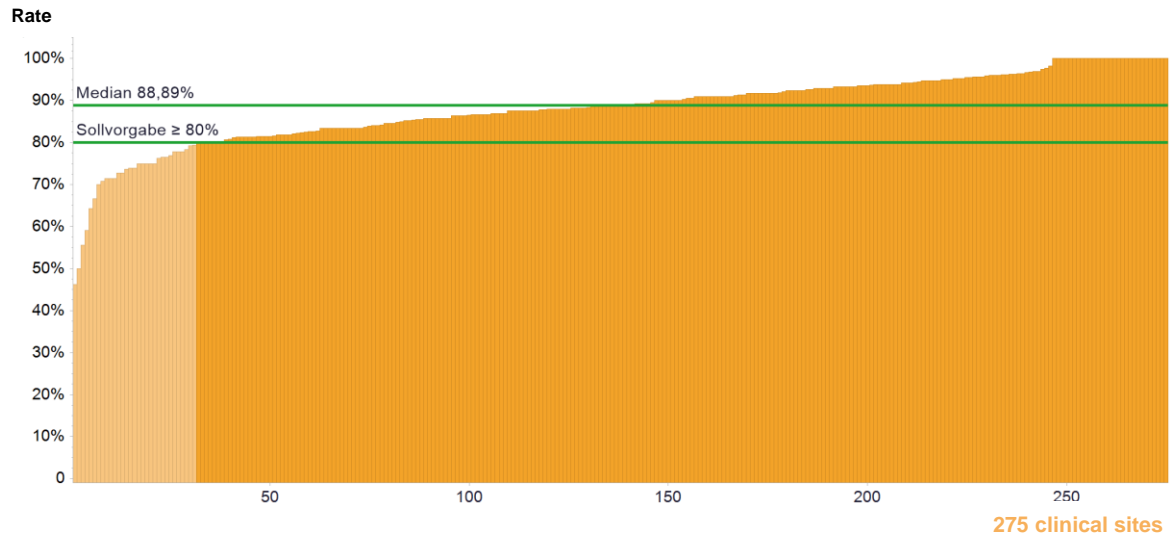
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	100%	100%	100%	100%	100%
Median	93.85%	95.45%	94.28%	90.00%	88.89%
25 <sup>th</sup> percentile	85.71%	85.71%	80.31%	76.92%	76.35%
5 <sup>th</sup> percentile	62.50%	64.52%	66.67%	50.00%	57.14%
Min	0.00%	44.44%	12.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
180	65.45%	77	42.78%

**Comment**

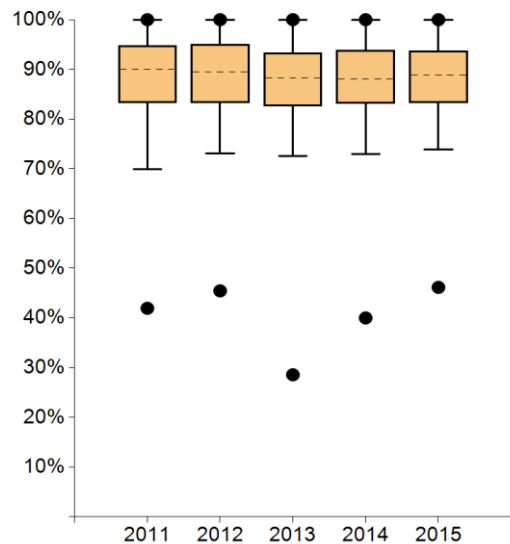
See also indicator 4.2. The median of the voluntary indicator has decreased slightly over time. Centres with the lowest rate have in general very small populations. The centres explained the non-performance of recommended RT as mainly due to refusal by the patients.

### 7.1. Recommended chemotherapy in cases of steroid receptor negative diagnostic finding (indicator year) (QI 9)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	All steroid receptor neg. primary cases with invasive breast cancer, for which chemotherapy was recommended	19*	2 - 99
Denominator	Primary cases with invasive breast cancer with steroid receptor negative diagnostic finding (excluding patients with metastases at initial presentation)	22*	4 - 105
Rate	Target value ≥ 80%	88.89%	46.15% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



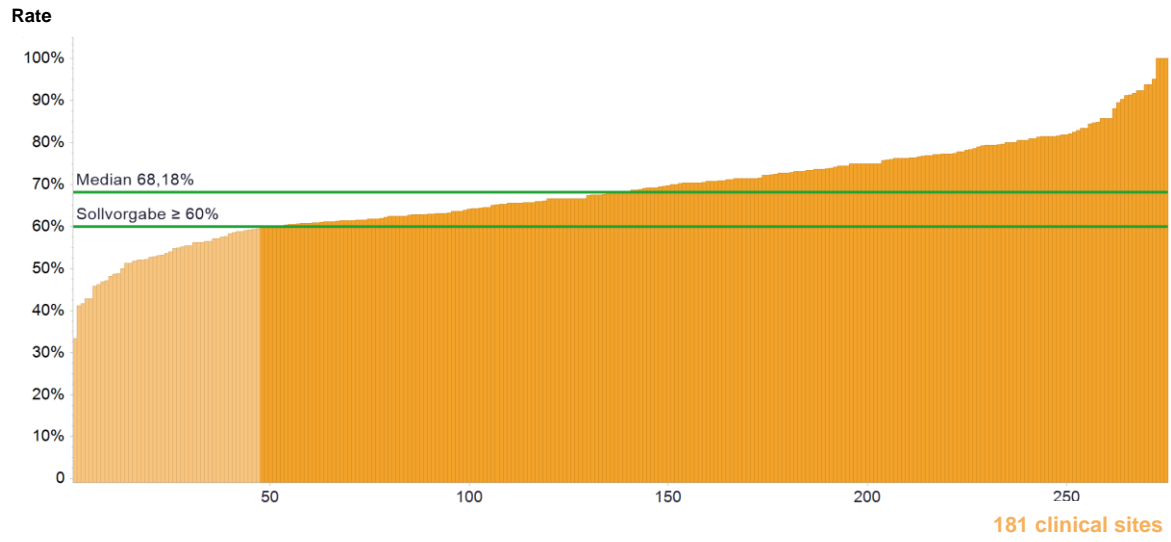
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	94.74%	95.00%	93.33%	93.85%	93.75%
Median	90.00%	89.53%	88.24%	88.00%	88.89%
25 <sup>th</sup> percentile	83.33%	83.33%	82.61%	83.10%	83.33%
5 <sup>th</sup> percentile	69.89%	73.14%	72.53%	73.01%	73.84%
Min	41.94%	45.45%	28.57%	40.00%	46.15%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	244	88.73%

**Comment**

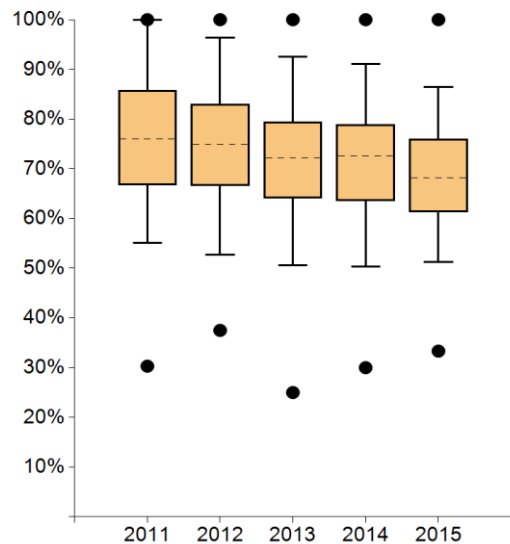
The course of the indicator over the years observed has remains nearly unchanged and 89% of the centres met the target of ≥80%. Non-recommendation was explained as being due to patients' age, comorbidities and pT1mi/pT1a tumours. The auditors have concluded that all decisions were well documented case-by-case decisions. In comparison with last year, the recommendation rate increased (151 vs. 119 centres with an increase), with a simultaneous slight increase in the population (6,528 vs. 6,327).

**7.2. Completed chemotherapies in cases of steroid receptive negative diagnostic finding (based on year previous to indicator year)**



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	All steroid receptor negative primary cases with invasive breast cancer, to whom chemotherapy was administered.	26*	5 - 112
Denominator	Numerator for indicator Nr. 7.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	37*	10 - 162
Rate	Target value ≥ 95%	68.18%	33.33% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	96.37%	92.50%	91.07%	86.43%
75 <sup>th</sup> percentile	85.84%	83.06%	79.49%	78.87%	76.06%
Median	76.06%	75.00%	72.22%	72.55%	68.18%
25 <sup>th</sup> percentile	66.67%	66.66%	64.15%	63.55%	61.36%
5 <sup>th</sup> percentile	55.09%	52.74%	50.59%	50.37%	51.26%
Min	30.30%	37.50%	25.00%	30.00%	33.33%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	228	82.91%

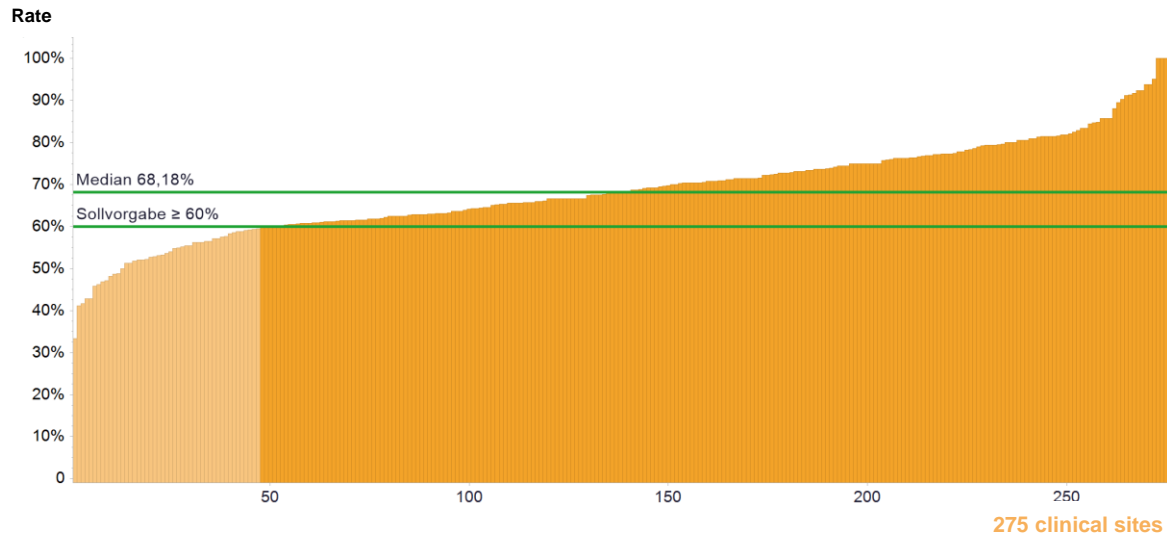
**Comment**

See also indicator 4.2.

The most frequent reasons given for non-conduct were refusal of therapy by patients and incomplete documentation.

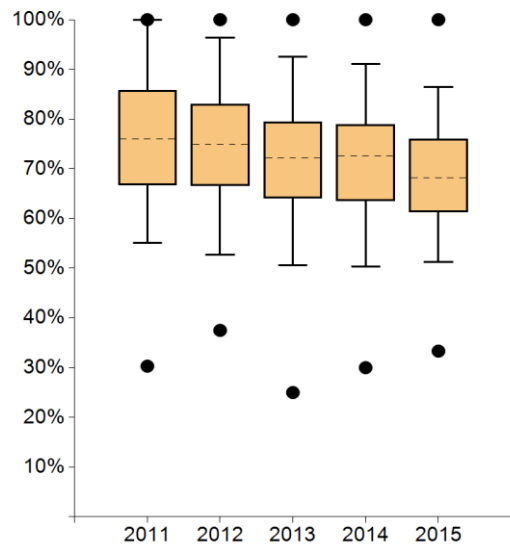


### 8.1. Recommended chemotherapy in cases of receptor positive and nodal positive diagnostic finding (indicator year) (QI 5)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	All receptor positive and nodal positive primary cases with invasive breast cancer in which a chemotherapy was recommended	26*	5 - 112
Denominator	Primary cases with invasive breast cancer with receptor positive and nodal positive diagnostic finding (excluding patients with metastases at initial presentation)	37*	10 - 162
Rate	Target value ≥ 60%	68.18%	33.33% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



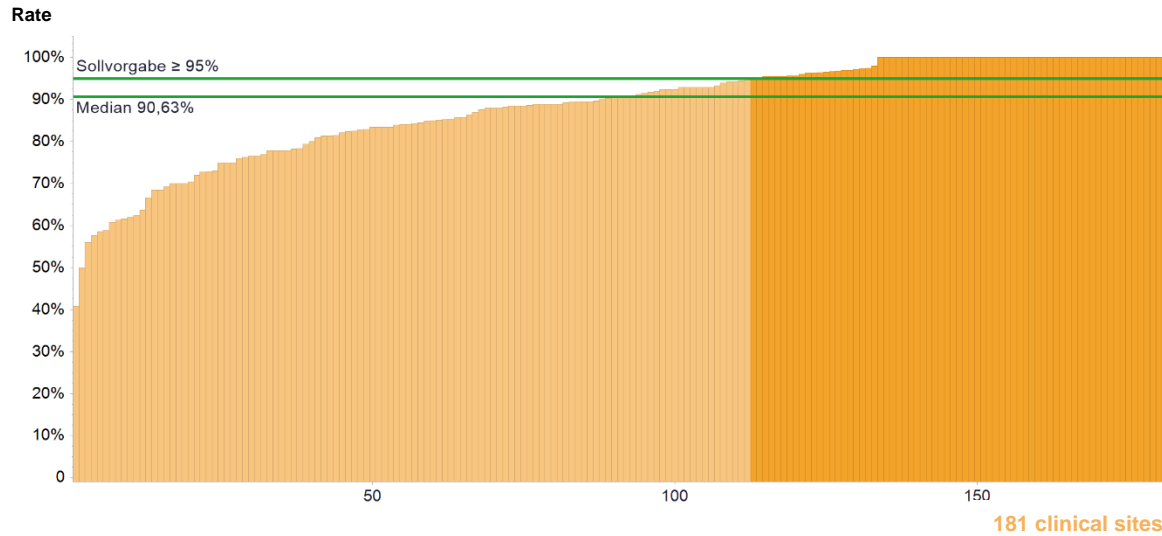
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	96.37%	92.50%	91.07%	86.43%
75 <sup>th</sup> percentile	85.84%	83.06%	79.49%	78.87%	76.06%
Median	76.06%	75.00%	72.22%	72.55%	68.18%
25 <sup>th</sup> percentile	66.67%	66.66%	64.15%	63.55%	61.36%
5 <sup>th</sup> percentile	55.09%	52.74%	50.59%	50.37%	51.26%
Min	30.30%	37.50%	25.00%	30.00%	33.33%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100,00%	228	82,91%

**Comment**

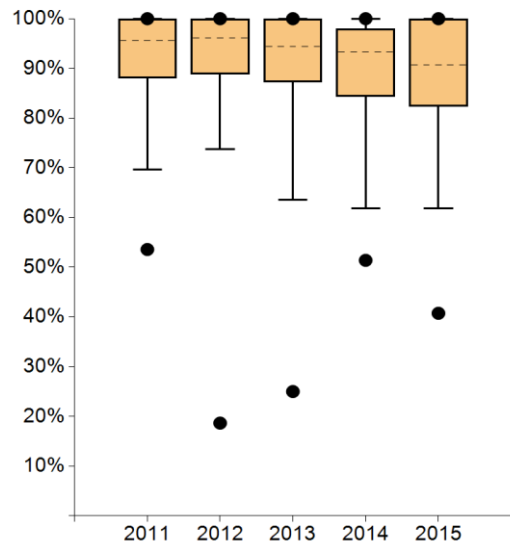
The median of the indicator has decreased over time. In comparison to last year, the rate of recommended chemotherapy has decreased in more centres (163 vs. 107), as has the total number of receptor positive and nodal positive patients recommended for chemotherapy (7,628 vs. 7,951). The population has remained almost unchanged (2014: 11.193 patients with rec. positive and nodal positive diagnosis. 2015: 11,218 patients). Reasons for non-recommendations have notably changed in comparison to last year: the most frequent reason (primary diagnosis 2015!) given was a low oncotype score. Other reasons include: luminal A-type, pN1a/pN1mi and existing comorbidities.

**8.2. Completed chemotherapy in cases of receptor positive and nodal positive diagnostic finding (based on year previous to indicator year)**



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	All receptor positive and nodal positive primary cases with invasive breast cancer that were treated with chemotherapy	21*	3 - 79
Denominator	Numerator for indicator no. 8.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	25*	3 - 87
Rate	Target value ≥ 95%	90.63%	40.74% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



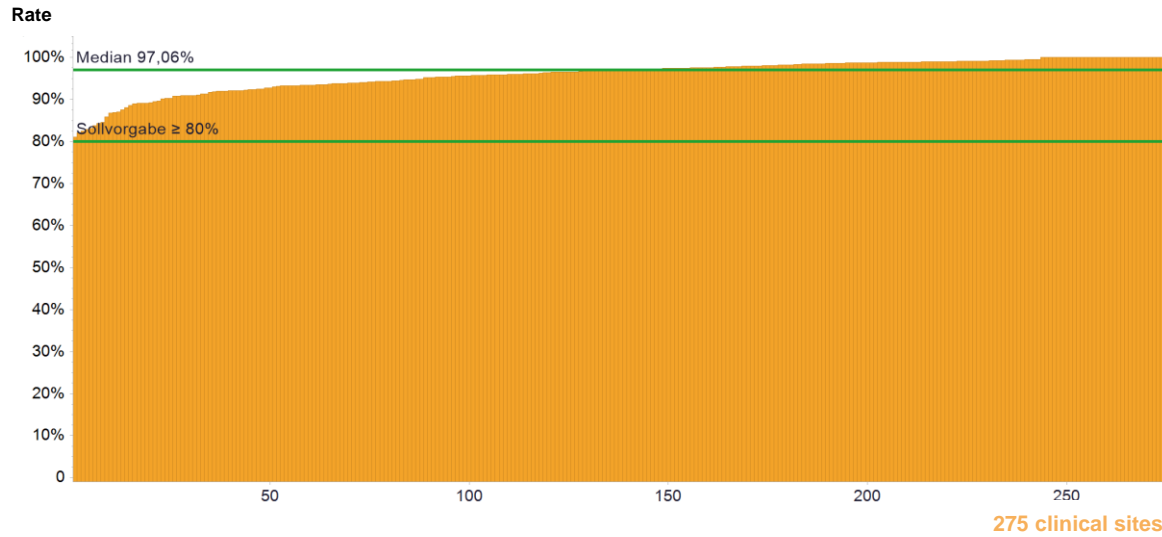
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	100%	100%	100%	97.96%	100%
Median	95.56%	96.15%	94.44%	93.33%	90.63%
25 <sup>th</sup> percentile	88.00%	88.88%	87.23%	84.31%	82.35%
5 <sup>th</sup> percentile	69.62%	73.68%	63.53%	61.78%	61.90%
Min	53.57%	18.65%	25.00%	51.39%	40.74%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
181	65.82%	69	38.12%

**Comment**

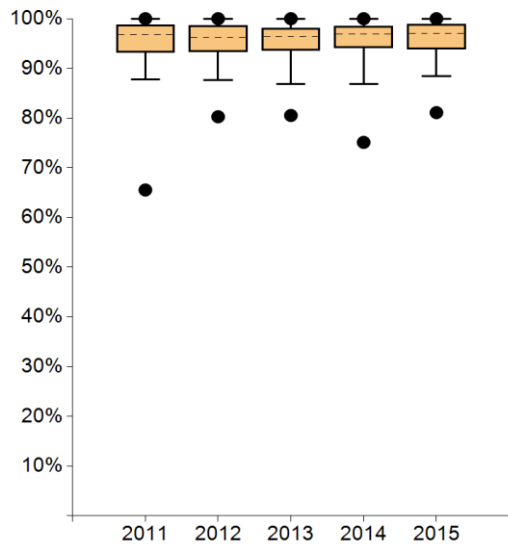
See also indicator 4.2.  
Like the other indicators checking the rate of recommended therapies realized, the most frequent named reasons for not conducting them were the refusal of the patient and difficulties with documentation when the chemotherapy was conducted by external providers.

**9.1. Recommended endocrine therapy in cases of steroid receptor positive diagnostic finding (indicator year) (Q7)**



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	All steroid receptor positive primary cases in which an endocrine therapy was recommended	114*	28 - 611
Denominator	Primary cases with invasive breast cancer with steroid receptor positive diagnostic finding (excluding patients with metastases at initial presentation)	121*	29 - 663
Rate	Target value ≥ 80%	97.06%	81.10% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



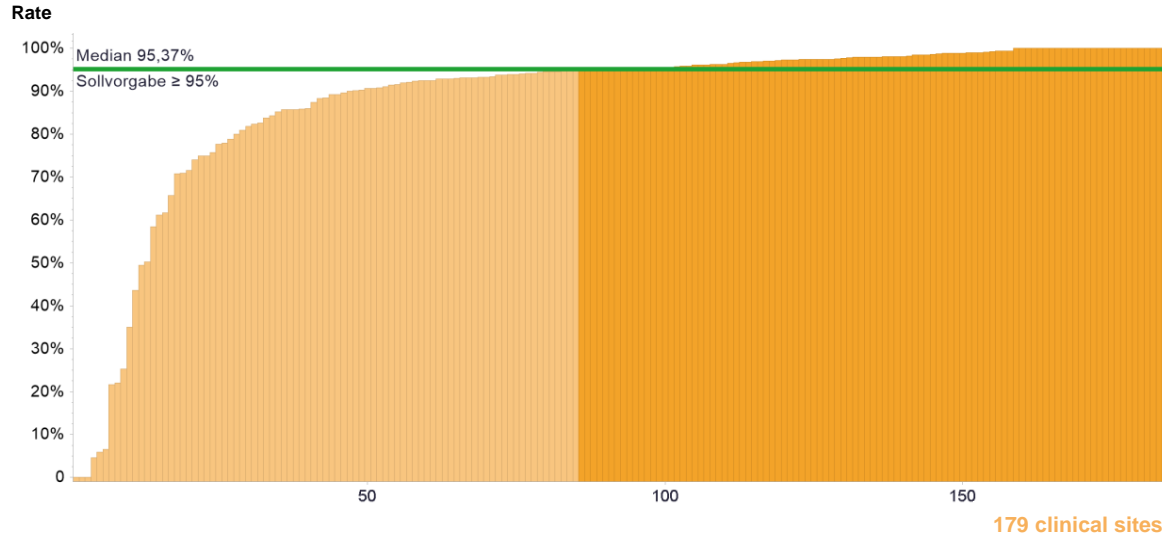
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	98.70%	98.60%	98.15%	98.48%	98.85%
Median	96.77%	96.27%	96.40%	96.94%	97.06%
25 <sup>th</sup> percentile	93.22%	93.33%	93.62%	94.07%	93.85%
5 <sup>th</sup> percentile	87.72%	87.64%	86.88%	86.81%	88.49%
Min	65.54%	80.27%	80.53%	75.12%	81.10%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	275	100.00%

**Comment**

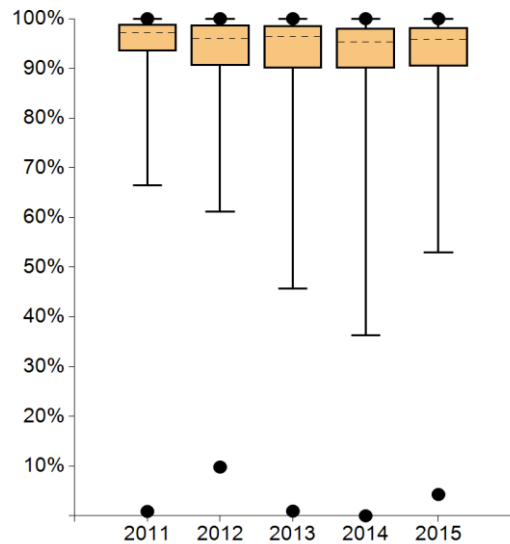
There has been very good implementation of the indicator. All centres met the target of 80%.

**9.2. Initiated endocrine therapy in cases of steroid receptive positive diagnostic finding (in relation to the previous indicator year)**



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Steroid rec. pos. primary cases with the initiation of endocrine therapy	101*	6 - 342
Denominator	Numerator for indicator no. 9.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	112*	32 - 412
Rate	Target value ≥ 95%	95.83%	4.29% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



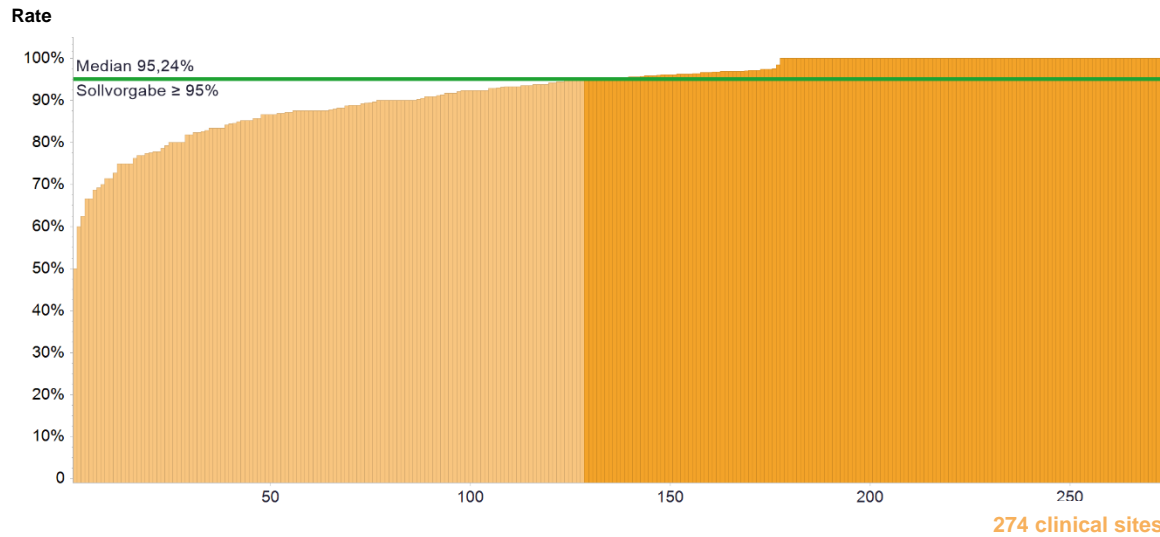
	2011	2012	2013	2014	2015
● Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	98.91%	98.71%	98.63%	98.13%	98.20%
Median	97.19%	96.00%	96.36%	95.37%	95.83%
25 <sup>th</sup> percentile	93.41%	90.53%	90.03%	89.96%	90.42%
5 <sup>th</sup> percentile	66.46%	61.13%	45.69%	36.28%	53.02%
● Min	0.88%	9.80%	0.94%	0.00%	4.29%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
179	65.09%	110	61.45%

**Comment**

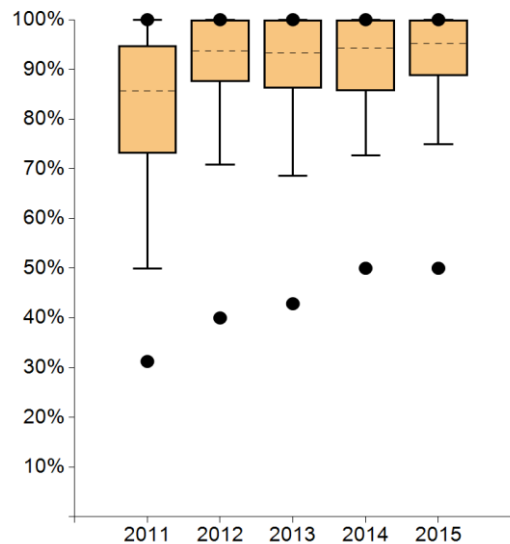
See indicator 4.2.  
The most frequent reason given for not reaching the target value of 95% was loss of information because the endocrine therapy was prescribed by private practitioners.

**10.1. Recommended Trastuzumab therapy over one year in cases of HER-2 positive diagnostic finding (indicator year) (QI 8)**



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	HER2 pos. primary cases, for which a trastuzumab therapy was recommended for over 1 year	16*	1 - 91
Denominator	Primary cases with HER2 pos. diagnostic finding (excluding patients with metastases at initial presentation)	17.5*	1 - 95
Rate	Target value ≥ 95%	95.24%	50.00% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



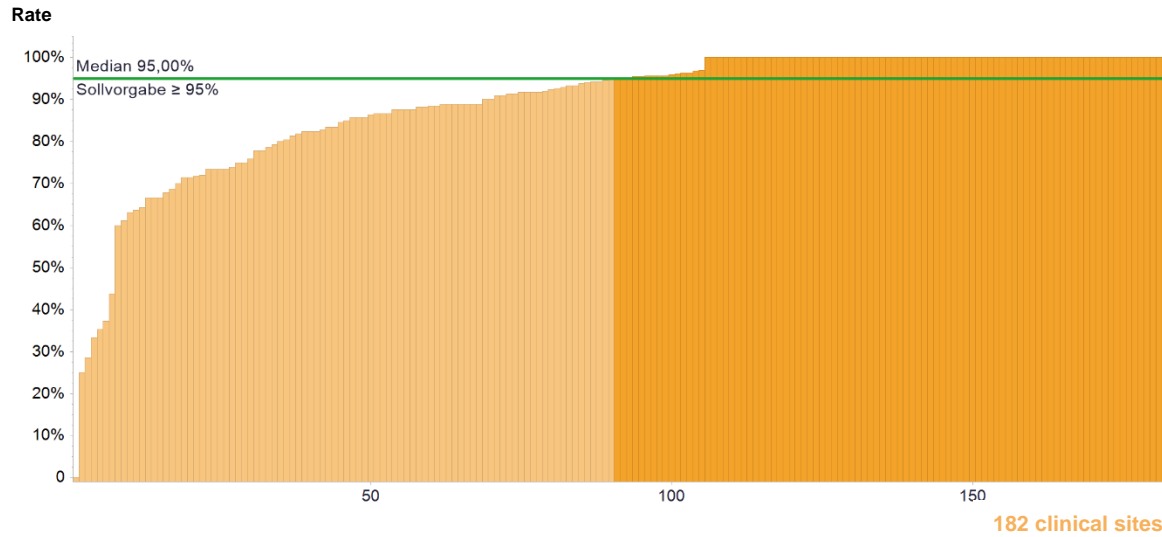
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	94.74%	100%	100%	100%	100%
Median	85.71%	93.75%	93.33%	94.28%	95.24%
25 <sup>th</sup> percentile	73.05%	87.50%	86.21%	85.71%	88.73%
5 <sup>th</sup> percentile	49.86%	70.87%	68.63%	72.73%	75.00%
Min	31.25%	40.00%	42.86%	50.00%	50.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
274	99.64%	146	53.28%

**Comment**

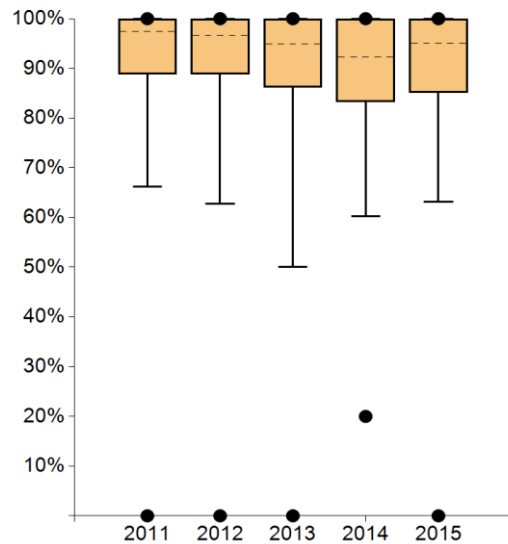
In all, 53% of the centres met the target value of 95%, more than in the previous year. The median has increased continuously since 2011. Also, the recommendation rate of Trastuzumab therapies has increased in more centres (162 centres with an increasing/unchanged rate vs. 106 centres with a decreasing rate). Multimorbidity of patients and small tumours (T1mi, T1a) were the most frequent reasons for non-recommendation.

## 10.2. Completed trastuzumab therapy over 1 year in cases of HER2 positive diagnostic finding (in relation to the previous indicator year)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	HER-2 pos. primary cases, who received trastuzumab therapy for ≥ 1 year	14*	0 - 53
Denominator	Numerator for indicator no. 10.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	16*	1 - 58
Rate	Target value ≥ 95%	95.00%	0.00% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



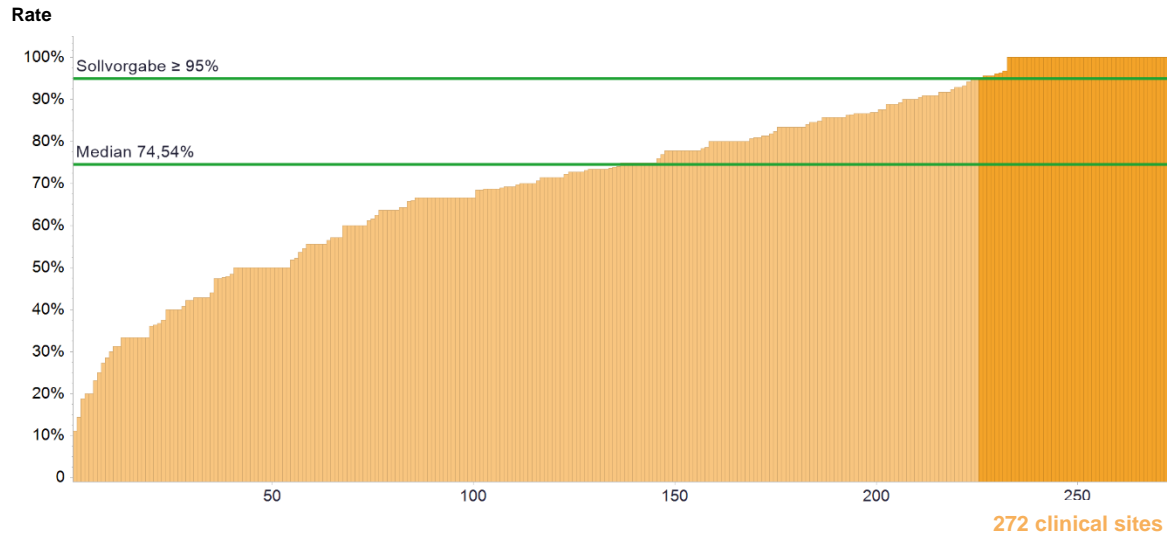
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	100%	100%	100%	100%	100%
Median	97.41%	96.66%	94.87%	92.31%	95.00%
25 <sup>th</sup> percentile	88.89%	88.88%	86.20%	83.33%	85.18%
5 <sup>th</sup> percentile	66.15%	6.81%	50.00%	60.21%	63.18%
Min	0.00%	0.00%	0.00%	20.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
182	66.18%	92	50.55%

### Comment

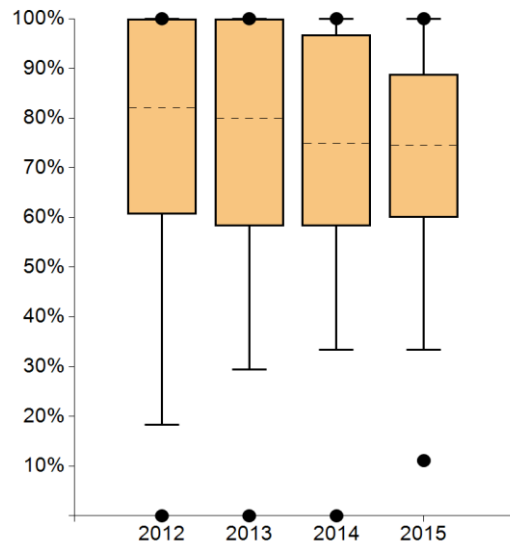
See indicator 4.2.  
The most frequent reasons given for not reaching the target value of ≥95% for this voluntary indicator were, similar to the previous indicators, patients' refusal of therapy and missing information.

# 11. Endocrine therapy in cases of metastases (QI 11)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Patients for whom an endocrine therapy was begun as a first-line therapy in metastasised stage	9*	1 - 62
Denominator	All patients with steroid receptor positive invasive breast cancer and initial diagnosis of metastases (including patients with metastases at initial presentation)	13*	1 - 94
Rate	Target value ≥ 95%	74.54%	11.11% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



	2011	2012	2013	2014	2015
Max	-----	100%	100%	100%	100%
95 <sup>th</sup> percentile	-----	100%	100%	100%	100%
75 <sup>th</sup> percentile	-----	100%	100%	96.77%	88.89%
Median	-----	82.08%	80.00%	75.00%	74.54%
25 <sup>th</sup> percentile	-----	60.63%	58.33%	58.28%	60.00%
5 <sup>th</sup> percentile	-----	18.36%	29.36%	33.33%	33.33%
Min	-----	0.00%	0.00%	0.00%	11.11%

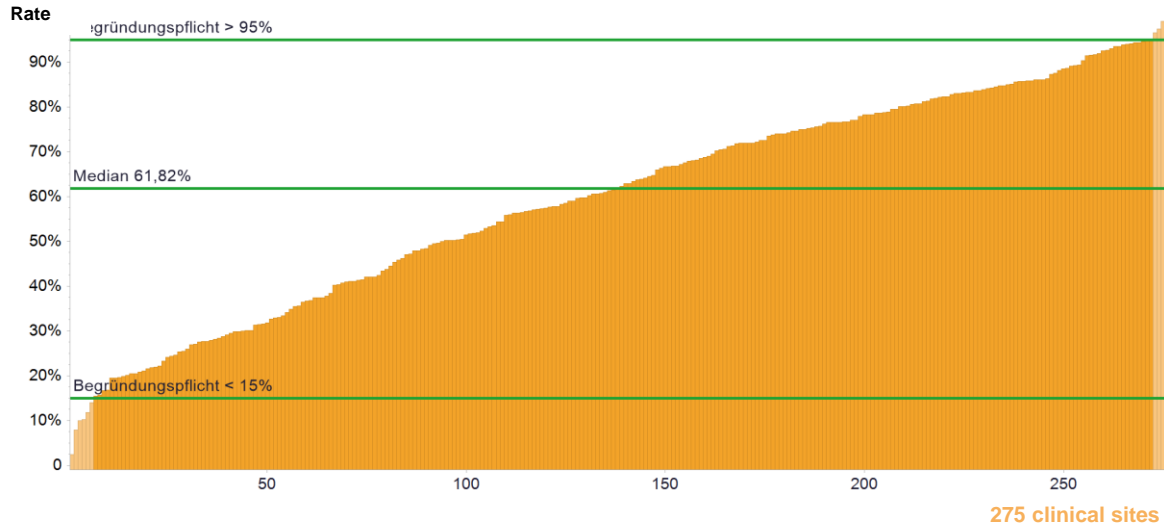
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
272	98.91%	47	17.28%

**Comment**

Only 17% of the centres met the target of 95%. This is even less than in the previous year (2016: 26%, 2015 31%). When endocrine therapy was not chosen as the first-line-therapy in cases of metastases, centres gave the following reasons: HER2-positive diagnosis, advanced metastases, death of patients, triple positive diagnosis, patients' wish for chemotherapy or external starting of chemotherapy. In comparison with last year, the absolute number of patients with an initial diagnosis of metastases has increased (3,971 vs. 3,532), as has the start of endocrine first-line therapies (2,857 vs. 2,585).



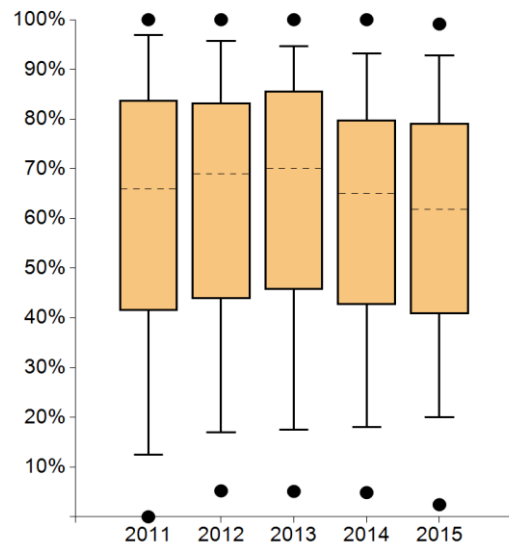
## 12. Psycho-oncologic care (conversation >25 min)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Number of primary patients, who received psycho-oncological care (length of consultation > 30 Min.)	112*	7 - 886
Denominator	All primary cases including patients with local recurrence/newly diagnosed metastases	202*	52 - 1077
Rate	Mandatory statement of reasons** <15% und >95%	61,82%	2,44% - 99,12%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

\*\* For values outside the plausibility limit(s) the Centres must give the reasons.



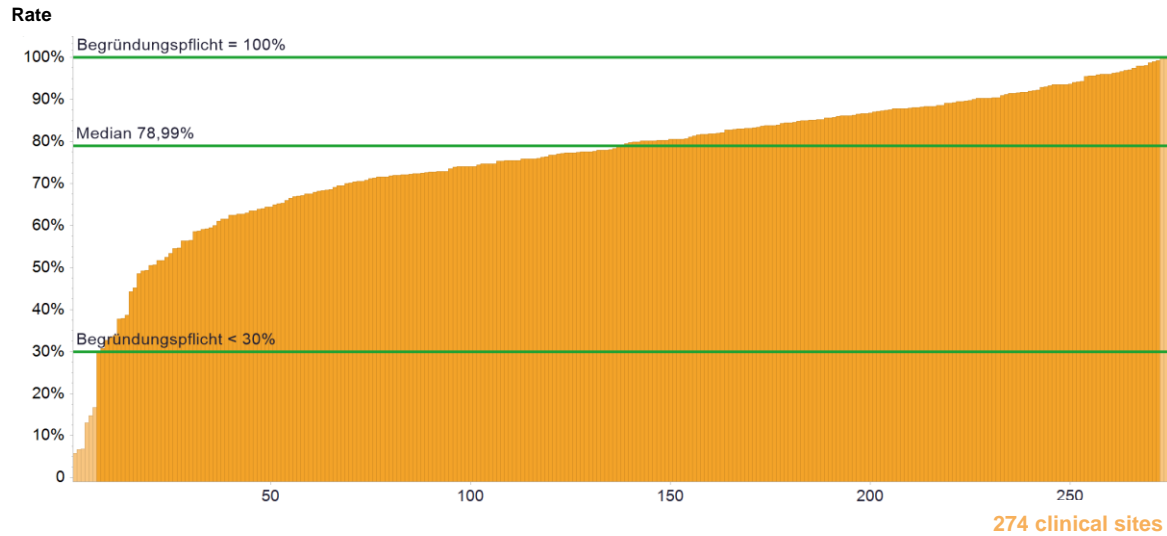
	2011	2012	2013	2014	2015
● Max	100%	100%	100%	100%	99.12%
● 95 <sup>th</sup> percentile	96.96%	95.73%	94.60%	93.20%	92.81%
● 75 <sup>th</sup> percentile	83.75%	83.23%	85.60%	79.84%	79.18%
● Median	65.99%	69.02%	70.07%	65.06%	61.82%
● 25 <sup>th</sup> percentile	41.50%	43.88%	45.74%	42.67%	40.82%
● 5 <sup>th</sup> percentile	12.55%	17.02%	17.57%	18.04%	20.05%
● Min	0.00%	5.22%	5.11%	4.87%	2.44%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	266	96.73%

### Comment

In comparison with the rate of psycho-oncological consultations in the previous year, the rate has increased in more centres (143 centres with an increase vs. 127 centres with a decrease). The centres with the lowest rates had higher rates in the previous year. As reasons for low rates, the centres reported: the conduct of screening, vacant positions and a lack of qualified applicants or a lack of personnel resources, as well as a strong breast-care nurse network. Auditors have made a high number of remarks.

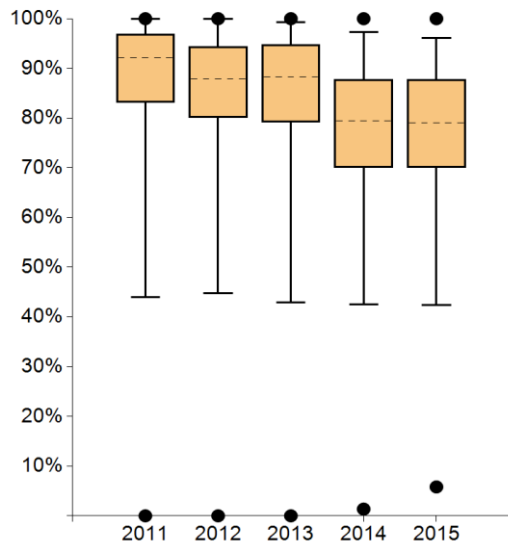
### 13. Social service counseling



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Number of primary patients, who received social services counselling	150,5*	9 - 881
Denominator	All primary cases including patients with local recurrence/newly diagnosed metastases	202*	52 - 1077
Rate	Mandatory statement of reasons** <30% und =100%	78.99%	5.81% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

\*\* For values outside the plausibility limit(s) the Centres must give the reasons.



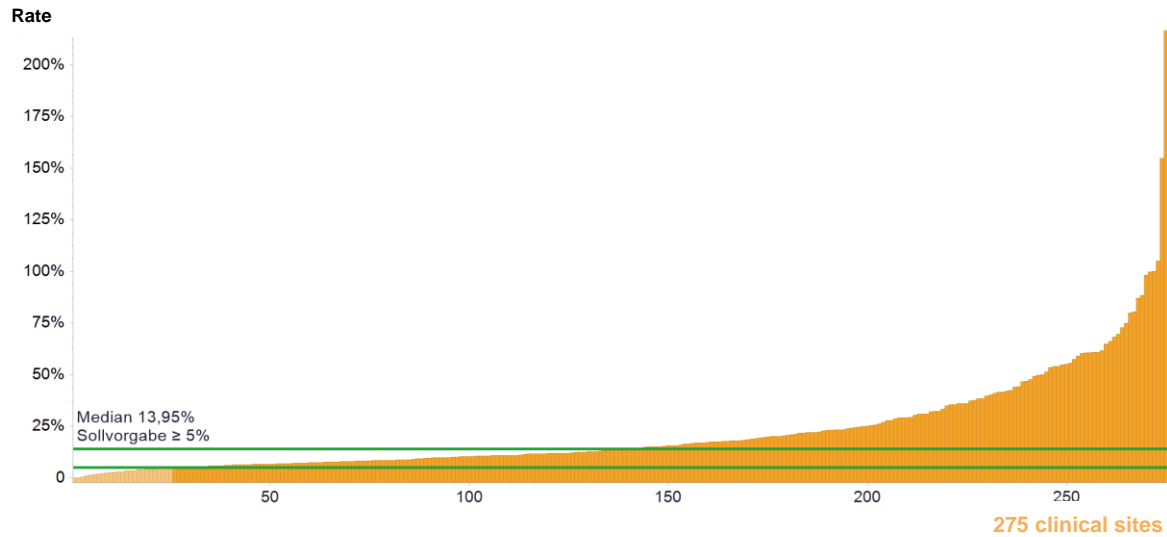
	2011	2012	2013	2014	2015
● Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	99.34%	97.31%	96.12%
75 <sup>th</sup> percentile	96.95%	94.35%	94.76%	87.81%	87.72%
Median	92.19%	87.87%	88.33%	79.37%	78.99%
25 <sup>th</sup> percentile	83.16%	80.16%	79.14%	69.99%	70.02%
5 <sup>th</sup> percentile	43.91%	44.71%	42.97%	42.56%	42.33%
● Min	0.00%	0.00%	0.00%	1.35%	5.81%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
274	99.64%	266	97.08%

**Comment**

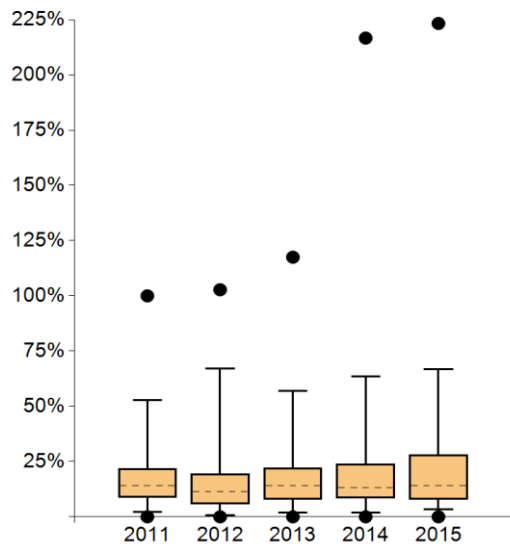
The median of the rate for counselling conducted by social services has decreased. At the centre level the counselling rate has also decreased (137 vs. 132 centres with a decrease). In the audit year 2014, the numerator was expanded and patients with a secondary metastasis or local recurrence were also included. The rate of counselling (+4,000) did not follow the increase in population from 2013 to 2015 (+10,300). The 5 centres with the lowest counselling rates are located in Austria and Switzerland. These countries have different legislative frameworks for social services. The German centre with the lowest rate received a deviation remark and will restructure its social services department.

## 14. Participation in research study



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	All patients who were included in a study subject to an ethics vote	26*	0 - 1007
Denominator	Primary cases	177*	50 - 891
Rate	Target value ≥ 5%	13.95%	0,00% - 223.28%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



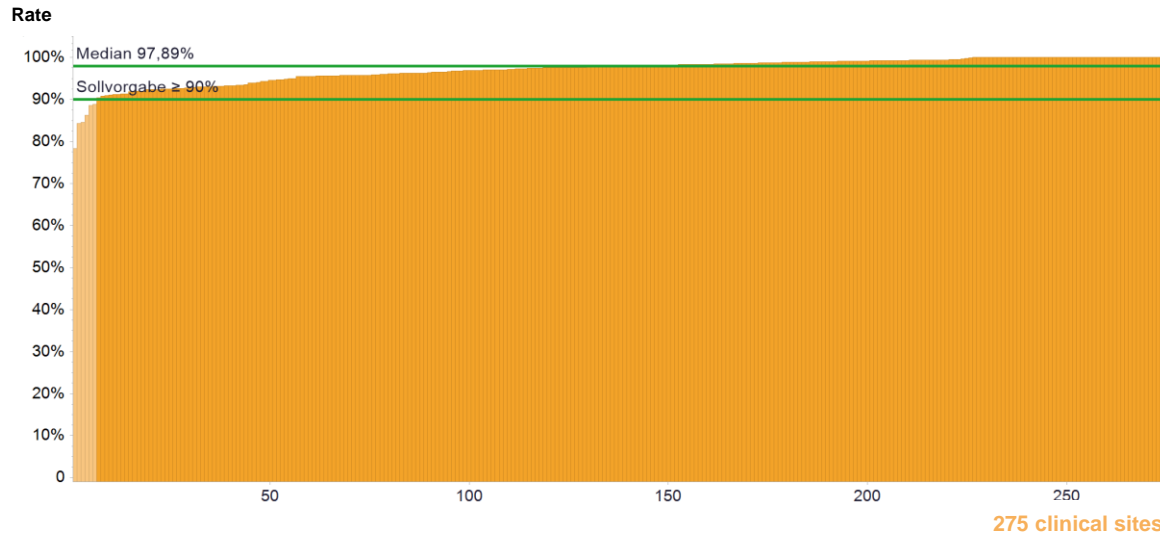
	2011	2012	2013	2014	2015
Max	100%	102.77%	117.50%	216.67%	223.28%
95 <sup>th</sup> percentile	52.89%	67.01%	57.11%	63.65%	66.65%
75 <sup>th</sup> percentile	21.84%	19.43%	21.99%	23.80%	28.18%
Median	14.14%	11.27%	14.11%	13.33%	13.95%
25 <sup>th</sup> percentile	8.85%	5.68%	7.92%	8.54%	7.92%
5 <sup>th</sup> percentile	2.18%	0.71%	1.85%	1.84%	3.31%
Min	0.00%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	250	90.91%

### Comment

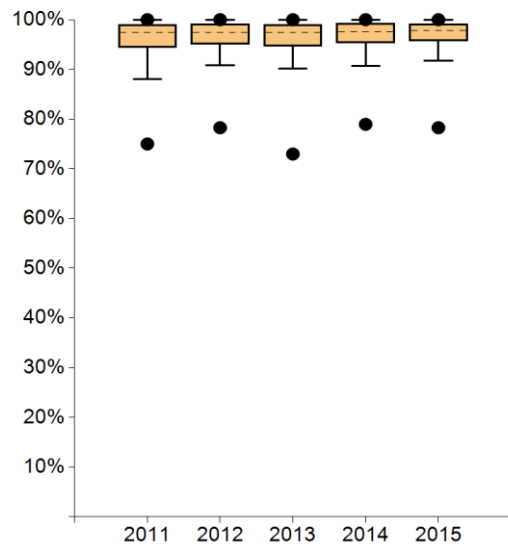
The number of centres with an increase in patient participation in studies in the previous year is larger than the number of centres with a decrease (150 vs. 120 centres). Low study participations are explained as being due to delays in the start of planned studies and/or personnel difficulties. The centre with the lowest study participation could increase its study inclusion by 9%. The auditors made a number of remarks, indicated deviations and discussed actions for improvement. The centre with the highest rate included patients in more than one study and also offered a broad spectrum of studies covering different fields.

# 15. Pre-therapeutic histological confirmation (QI 1)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Patients with pretherapeutic histological diagnosis confirmation by means of a punch or vacuum biopsy	152*	36 - 783
Denominator	Patients with initial procedure and histology of invasive breast cancer or DCIS as primary disease	156*	45 - 803
Rate	Target value ≥ 90%	97.89%	78.26% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



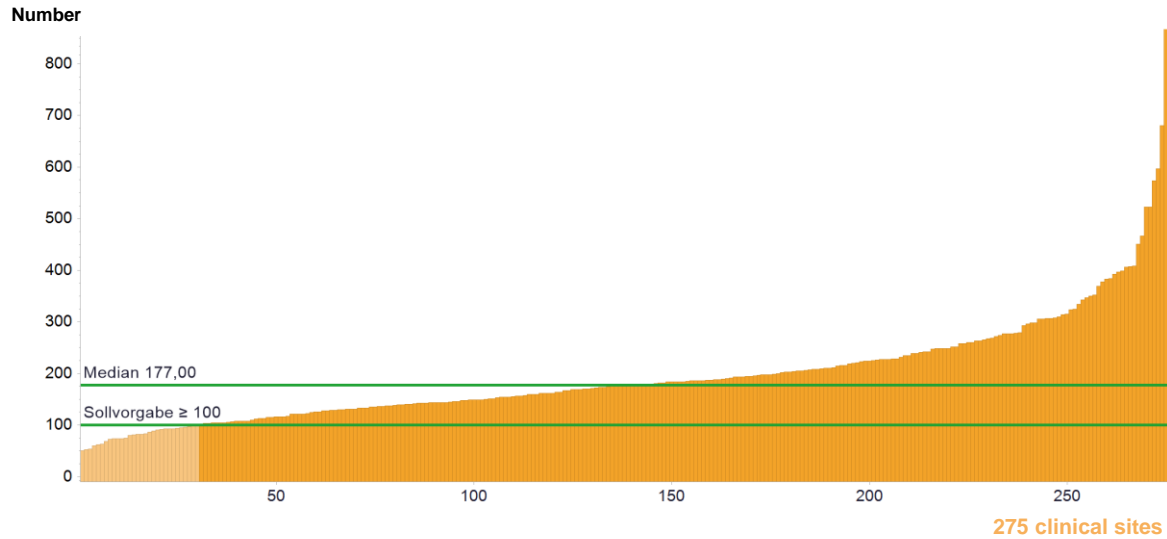
	2011	2012	2013	2014	2015
● Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	98.96%	99.13%	99.06%	99.23%	99.21%
Median	97.47%	97.46%	97.37%	97.55%	97.89%
25 <sup>th</sup> percentile	94.36%	95.04%	94.70%	95.34%	95.73%
5 <sup>th</sup> percentile	88.09%	90.79%	90.19%	90.69%	91.74%
● Min	75.00%	78.26%	72.97%	78.95%	78.26%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	269	97.82%

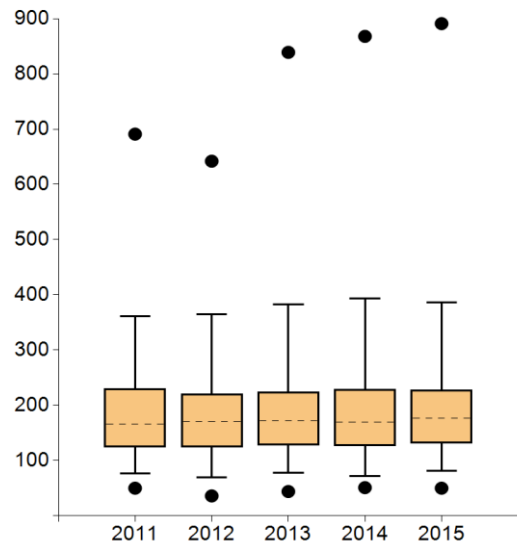
### Comment

There has continuously been very good implementation of this quality indicator in the guidelines. Only 6 centres did not meet the target. The reasons given for non-preoperative confirmation with a punch/vacuum biopsy were: benign biopsy results (discussed action: discussion of method in quality circles), micro-calcification, refusal by the patients, not feasible because of small tumour size and ulcerated breast carcinoma.

## 16. Primary cases BC



	Definition of indicator	All clinical sites 2015	
		Median	Range
Number	primary cases	177	50 - 891
	Target value $\geq 100$		



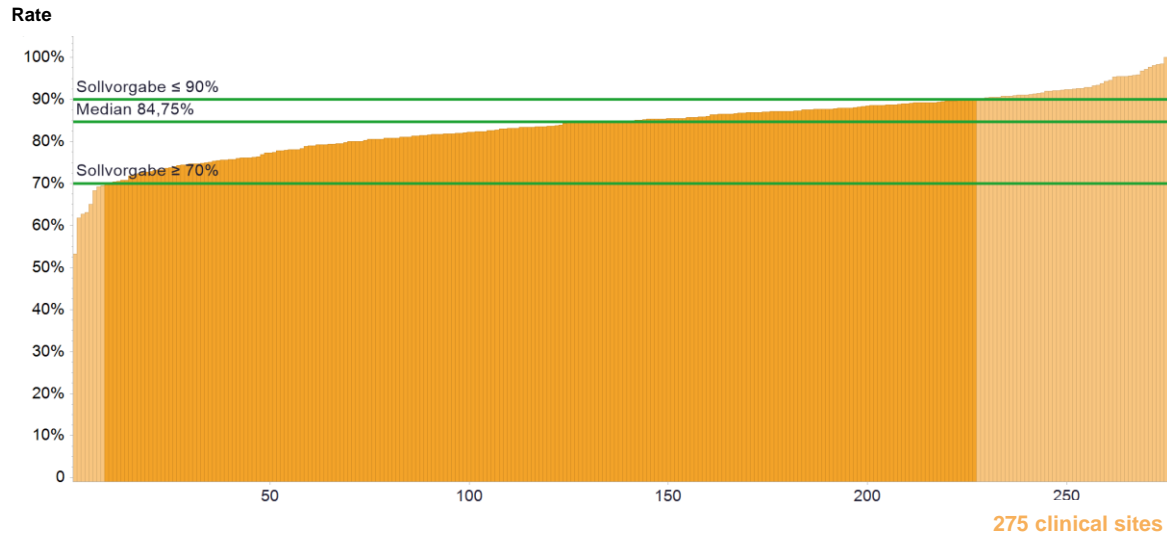
	2011	2012	2013	2014	2015
Max	691.00	642.00	839.00	868.00	891.00
95 <sup>th</sup> percentile	361.00	365.15	383.00	393.50	386.40
75 <sup>th</sup> percentile	230.00	221.25	224.00	228.50	228.00
Median	166.00	170.50	172.00	169.00	177.00
25 <sup>th</sup> percentile	124.50	123.75	128.00	127.00	131.00
5 <sup>th</sup> percentile	76.75	69.70	77.60	72.00	81.70
Min	50.00	36.00	44.00	51.00	50.00

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	245	89.09%

### Comment

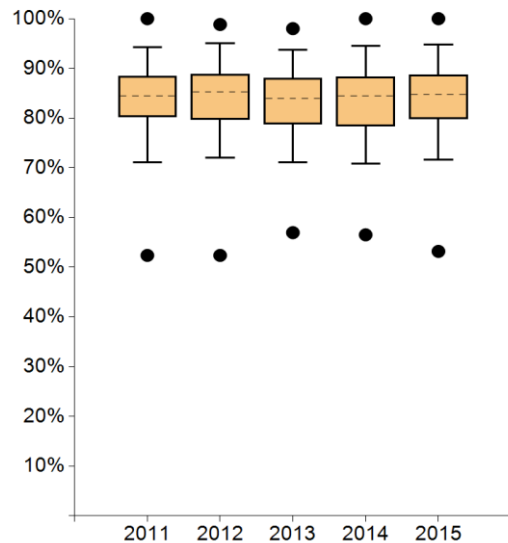
The median of the primary cases is increasing and in comparison, with last year more centres show an increase in cases (143 centres with an increase). The population of primary cases treated in centres has also increased by 300 patients from 2014 to 2015. This is a very interesting observation as the DRG statistics for hospitals over the same time period show a decrease of 1,000 cases of operated patients with invasive breast carcinoma or DCIS.

## 17. Breast conserving therapy in cases of pT1 primary cases



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Number BCT (final state after surgery) in cases of pT1 (incl. (y)pT1)	63*	14 - 422
Denominator	Surgically treated primary cases with pT1	75*	16 - 485
Rate	Target value 70 - 90%	84,75%	53,19% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



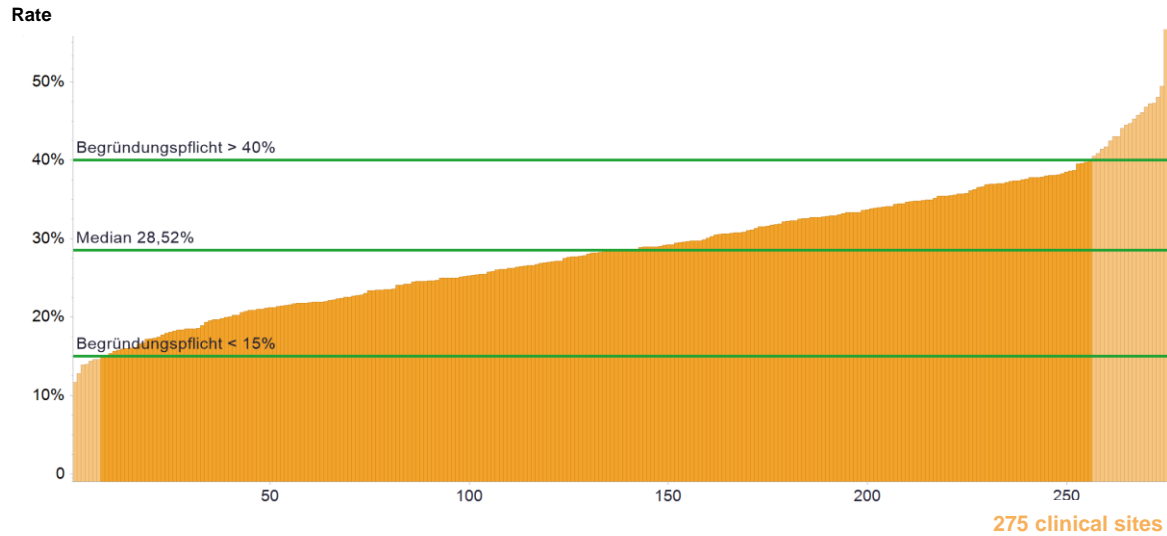
	2011	2012	2013	2014	2015
Max	100%	98.83%	98.00%	100%	100%
95 <sup>th</sup> percentile	94.22%	95.05%	93.75%	94.53%	94.78%
75 <sup>th</sup> percentile	88.46%	88.88%	88.03%	88.33%	88.74%
Median	84.46%	85.26%	83.91%	84.48%	84.75%
25 <sup>th</sup> percentile	80.25%	79.69%	78.79%	78.35%	79.86%
5 <sup>th</sup> percentile	71.13%	72.04%	71.07%	70.79%	71.57%
Min	52.38%	52.38%	56.96%	56.52%	53.19%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100,00%	219	79,64%

### Comment

The target value (70–90%) for this indicator was undershot and overshoot, not to instigate or avoid initiating therapy, but to take patients' wishes into account. The evaluation of results shows that the most frequent reason given for not reaching the target (≥70%) was the wish of mainly elderly patients after mastectomy. In addition, centres cited multicentric/multifocal tumours, pT1 in male patients, concomitant DCIS or genetic predisposition. The reason for overshooting the target (>90%) was predominantly the high number of young patients who were referred, preferably after screening.

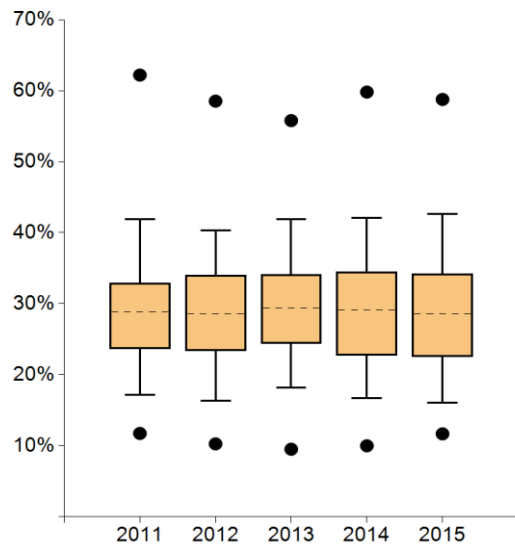
## 18. Mastectomies primary cases



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Number of mastectomies (final state after surgery)	43*	7 - 233
Denominator	Surgically treated primary cases	156*	45 - 803
Rate	Mandatory statement for reasons** <15% und >40%	28.52%	11.68% - 58.77%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

\*\* For values outside the plausibility limit(s) the Centres must give the reasons.



	2011	2012	2013	2014	2015
Max	62.20%	58.53%	55.79%	59.81%	58.77%
95 <sup>th</sup> percentile	41.85%	40.37%	41.85%	42.08%	42.64%
75 <sup>th</sup> percentile	32.91%	34.07%	34.15%	34.50%	34.24%
Median	28.83%	28.57%	29.41%	29.13%	28.52%
25 <sup>th</sup> percentile	23.65%	23.37%	24.41%	22.77%	22.53%
5 <sup>th</sup> percentile	17.21%	16.33%	18.21%	16.67%	16.02%
Min	11.74%	10.27%	9.52%	10.00%	11.68%

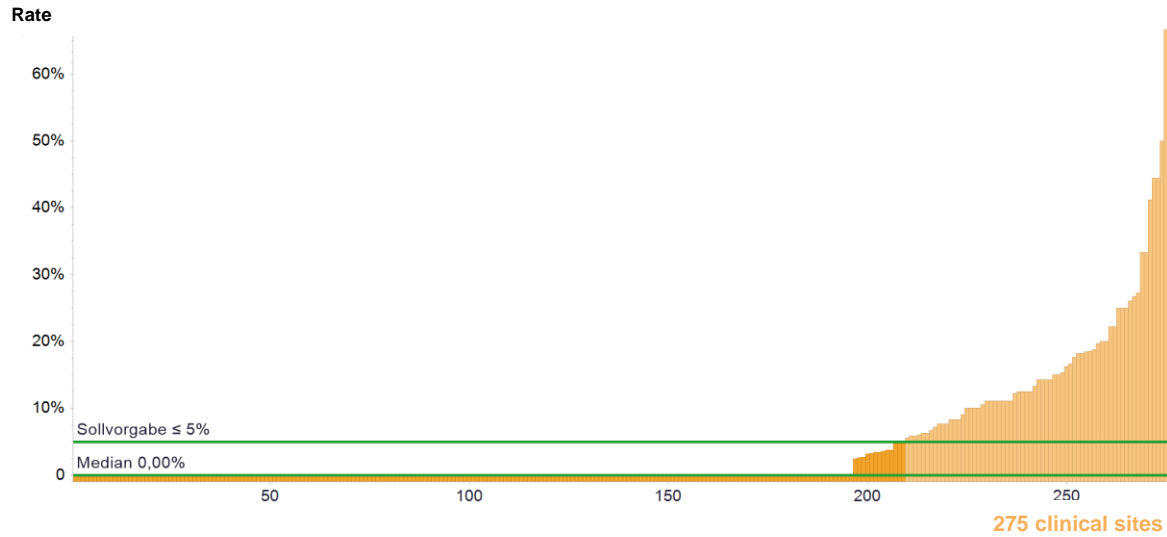
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	249	90.55%

### Comment

The rate of mastectomy has remained constant over time. In comparison to last year, the absolute number of mastectomies reported has decreased (13,514 vs. 13,710) as the number of operated primary cases has increased (47,175 vs. 47,098). One can also see that the centres with a high rate of mastectomy in 2015 maintained a high rate in 2016. Reasons include the high proportion of patients with a BRCA mutation and/or the primary reconstruction wish of patients with multicentric tumours and accompanying large DCIS. The auditors have discussed the indicator at length with the centres and have recommended, inter alia, that centres with very high rates and without unambiguous explanations conduct a pre-therapeutic tumour board.

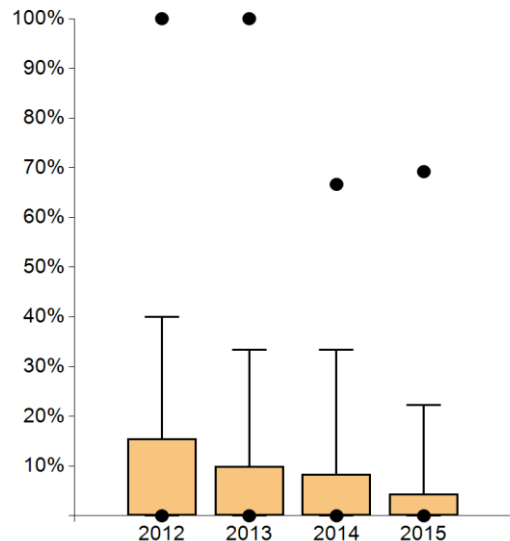


### 19. LN dissection in cases of DCIS (QI 3)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Patients with axillary lymph node removal	0*	0 - 12
Denominator	Patients with a primary diagnosis of DCIS and completed surgical treatment and BCT	12*	1 - 77
Rate	Target value ≤ 5%	0.00%	0.00% - 69.23%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



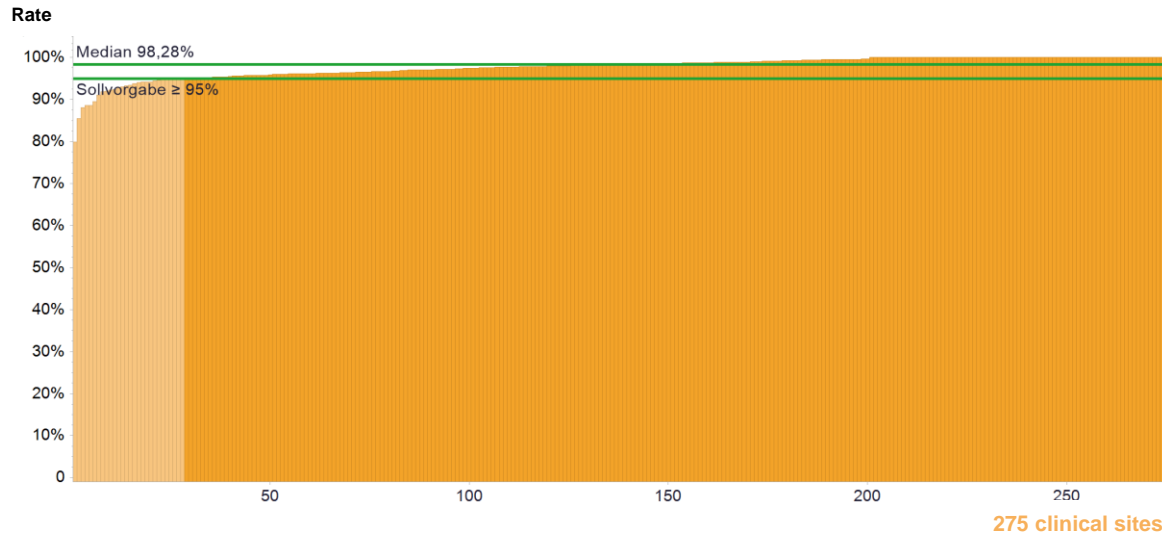
	2011	2012	2013	2014	2015
Max	----	100%	100%	66.67%	69.23%
95 <sup>th</sup> percentile	----	40.00%	33.33%	33.33%	22.22%
75 <sup>th</sup> percentile	----	15.50%	10.00%	8.33%	4.35%
Median	----	0.00%	0.00%	0.00%	0.00%
25 <sup>th</sup> percentile	----	0.00%	0.00%	0.00%	0.00%
5 <sup>th</sup> percentile	----	0.00%	0.00%	0.00%	0.00%
Min	----	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	209	76.00%

**Comment**

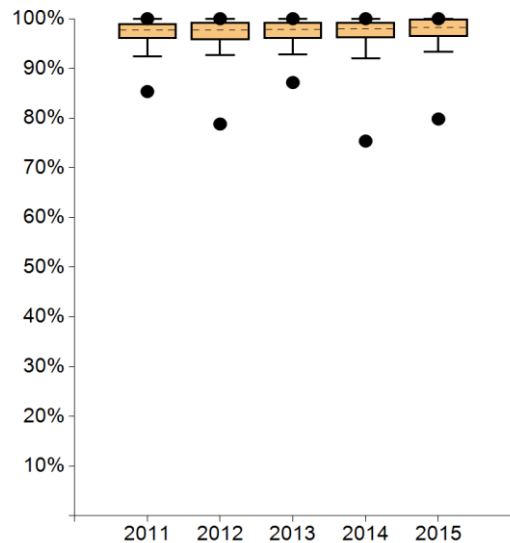
In all, 209 clinical sites met the target of <5%, an increase on the previous year (193). Over time, there has been a decrease in LN dissection in cases of DCIS (218 centres showed a decrease or remained unchanged at 0%). In addition, a reduction in axillary lymph node removal in cases of DCIS (185 vs. 239), with a slight increase in the population (3,937 vs 3.908), has been reported. The reasons given for removal were: small patient population, size of tumour (>5cm) and high grade tumours. The auditors intensively discussed the indicator and recommended various actions (i.e. discussion in a quality circle).

## 20. Determination of the nodal status in cases of inv. BC



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Number of primary cases with inv. breast cancer for which the nodal status was determined	134*	37 - 698
Denominator	Surgically treated primary cases with invasive breast cancer	136*	41 - 701
Rate	Target value ≥ 95%	98.28%	79.82% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



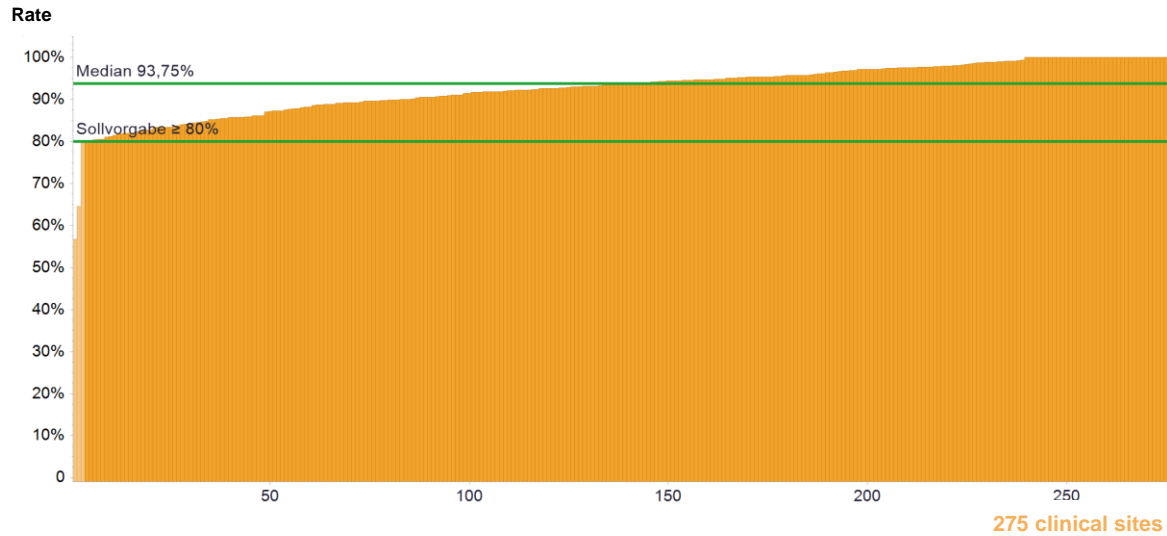
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	99.08%	99.30%	99.33%	99.32%	100%
Median	97.76%	97.70%	97.83%	97.93%	98.28%
25 <sup>th</sup> percentile	95.94%	95.65%	96.00%	96.15%	96.35%
5 <sup>th</sup> percentile	92.37%	92.66%	92.83%	92.02%	93.36%
Min	85.34%	78.81%	87.16%	75.38%	79.82%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	247	89.82%

### Comment

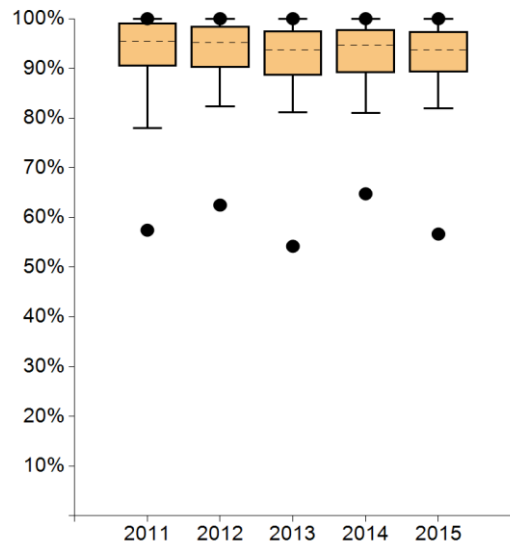
There has been good implementation of the indicator, but around 11% of the centres did not meet the target. In comparison to last year, more centres have a higher or unchanged (=100%) determination rate of the nodal status in cases of invasive BC. If the target was not reached, centres explained it as follows: previous operations, patients' refusal, participation in the INSEMA study, multimorbidity or palliative care and intra-operatively/histologically non-displayable sentinel lymph nodes. The auditors have checked all explanations carefully; in particular, the indication of "multimorbidity or palliative care" was critically scrutinized and a series of deviations were noted and remarks given.

## 21. SLNE only in cases of pN0 (QI 4)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Patients with a sentinel node biopsy only	72*	5 - 399
Denominator	Patients with invasive breast cancer as a primary disease and negative pN staging without preoperative tumour-specific therapy	80*	6 - 402
Rate	Target value ≥ 80%	93.75%	56.67% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



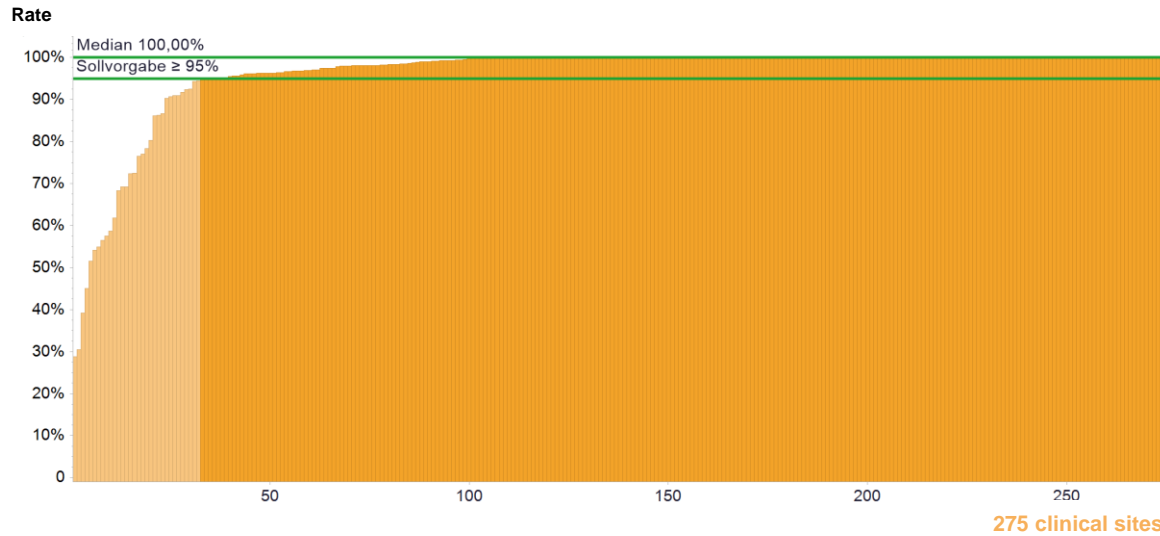
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	99.21%	98.45%	97.62%	97.84%	97.45%
Median	95,45%	95.20%	93.75%	94.69%	93.75%
25 <sup>th</sup> percentile	90.43%	90.14%	88.52%	89.05%	89.26%
5 <sup>th</sup> percentile	78.00%	82.29%	81.17%	81.06%	81.99%
Min	57.45%	62.50%	54.22%	64.77%	56.67%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	272	98.91%

### Comment

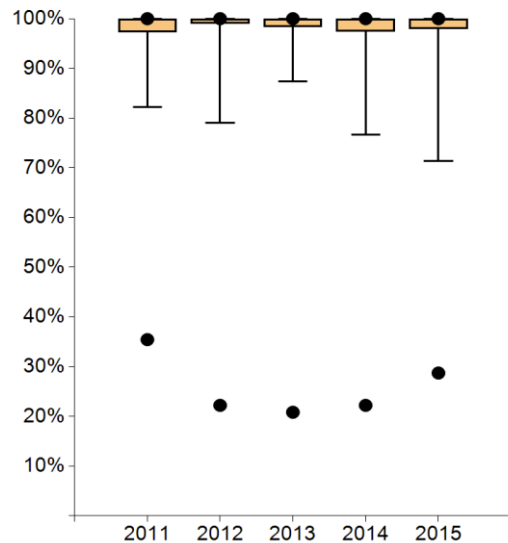
There has been very good implementation of the indicator. As in the previous year, only 3 centres did not meet the target. Two of these centres also fell below the target last year. As a reason, the centres stated that suspicious palpable lymph nodes were removed, in addition to marked lymph nodes. The auditors have checked the individual cases.

## 22. Intraoperative specimen radio-/sonography (QI 2)



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Operations with intra-operative specimen x-ray in cases of mammographic wire localisation and operations with intraoperative specimen sonography in cases of sonographic wire localisation	53*	4 - 409
Denominator	Operations with preoperative wire localisation guided by mammography or sonography	57*	4 - 451
Rate	Target value ≥ 95%	100%	28.72% - 100%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



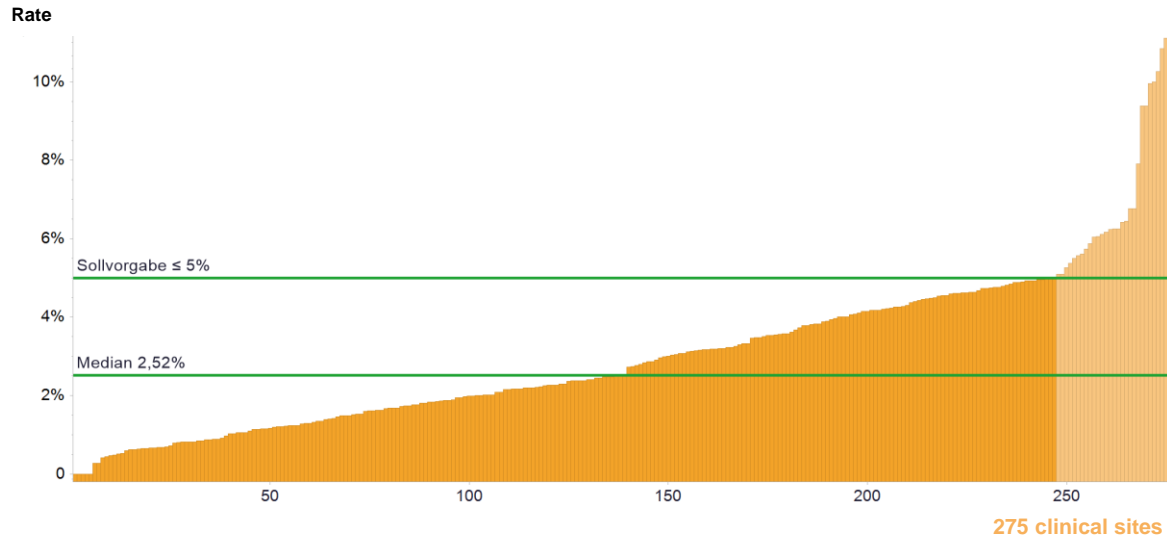
	2011	2012	2013	2014	2015
Max	100%	100%	100%	100%	100%
95 <sup>th</sup> percentile	100%	100%	100%	100%	100%
75 <sup>th</sup> percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25 <sup>th</sup> percentile	97.29%	99.00%	98.36%	97.50%	97.94%
5 <sup>th</sup> percentile	82.22%	78.99%	87.36%	76.61%	71.39%
Min	35.44%	22.22%	20.83%	22.22%	28,72%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	243	88.36%

### Comment

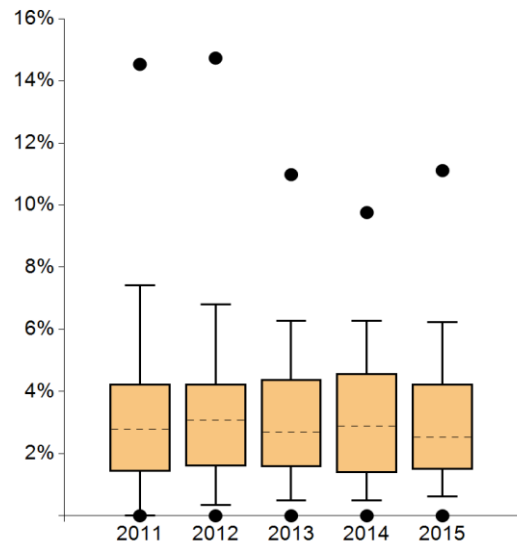
The evaluation shows that the implementation rate over the course of time remained good. The explanation across the board when the target was not met was the same: in the case of sonography-marked and intraoperatively palpable tumours, an immediate intraoperative pathological analysis was undertaken and no specimen sonography. In general, intraoperative sonography is renounced in the case that tumours are intraoperatively palpable. However, intraoperative specimen radiography is always conducted. The auditors provided several remarks for the centres that did not meet the target.

### 23. Revision operations primary cases



	Definition of indicator	All clinical sites 2015	
		Median	Range
Numerator	Revision surgery due to postoperative complications (only surgically treated primary cases)	4*	0 - 28
Denominator	Surgically treated primary cases	156*	45 - 803
Rate	Target value ≤ 5%	2.52%	0,00% - 11.11%

\*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



	2011	2012	2013	2014	2015
Max	14.53%	14.73%	10.98%	9.76%	11.11%
95 <sup>th</sup> percentile	7.42%	6.80%	6.28%	6.27%	6.24%
75 <sup>th</sup> percentile	4.25%	4.24%	4.40%	4.58%	4.25%
Median	2.78%	3.07%	2.70%	2.88%	2.52%
25 <sup>th</sup> percentile	1.43%	1.60%	1.57%	1.39%	1.49%
5 <sup>th</sup> percentile	0.00%	0.34%	0.50%	0.49%	0.61%
Min	0.00%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	247	89.82%

**Comment**

The number of centres reported as meeting the target has increased in comparison to last year. The centre with the highest rate from last year has an unremarkable rate this year. Moreover, 3 centres that did not meet the target were above the target last year. The auditors conducted a case-by-case assessment. As reasons for revisions, the centres named operations, impairment of wound healing and especially haemorrhages. The reasons given for revisions included change of the drainage system, training surgeries and anticoagulation. The most frequent measures agreed on with the auditors were individual case discussions within the quality circle with subsequent adaption of the process (i.e. tracking the course of the RR value during surgery).

# WISSEN AUS ERSTER HAND (FIRST-HAND KNOWLEDGE)



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in cooperation with:  
OnkoZert, Neu-Ulm  
[www.onkozert.de](http://www.onkozert.de)

Version e-A1-en; 13.10.2017

ISBN: 978-3-946714-53-8

