

Annual Report 2021

of the Certified Breast Cancer Centres (BCCs)

Audit year 2020 / indicator year 2019



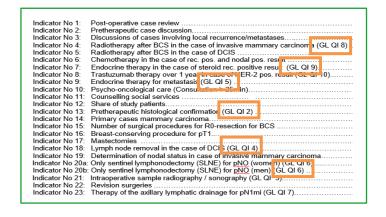




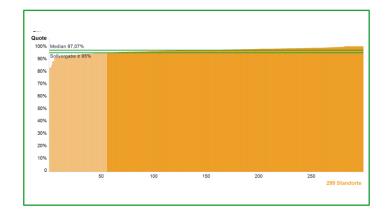
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General information



| | Definition of indicator | All o | clinical sites 2 | 2018 | |
|-------------|--|--------|------------------|-------------------|--|
| | | Median | Range | Patients Total | |
| Numerator | Primary cases of the denominator in which radiotherapy was recommended | 97* | 26 - 566 | 30,659 | |
| Denominator | Primary cases with an invasive mammary carcinoma and BCS (without primary M1 pat.) | 100* | 26 - 578 | 31,602 | |
| Rate | Target value ≥ 90% | 97.73% | 86.32% - 100% | 97.02%** | |



Quality indicators of the guidelines (GL 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 in the context of the guideline programme oncology. Further information: www.leitlinienprogramm-onkologie.de

Basic data indicator:

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

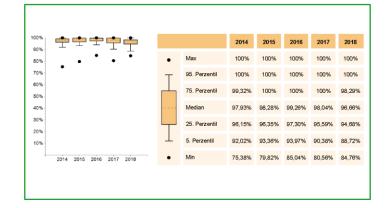
The **values** for the numerators, populations and rates of all Centres are given under range.

Under **Patients Total**, the percentage of the total number of patients treated in the centres according to the key figure is given.

Diagram:

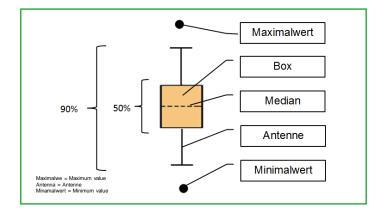
The x-axis indicates the number of Centres, the y-axis gives the values in percent or number (e.g. primary cases). The target value is depicted as a horizontal green line. The median, which is also depicted as a green horizontal line, divides the entire group into two equal halves.

General information



Cohort development:

The cohort development in the years 2015, 2016, 2017, 2018 and 2019 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 90th percentile area/range. The extreme values are depicted here as dots.



Status of the certification system: Breast Cancer Centres 2019

| | | 31.12.2020 | 31.12.2019 | 31.12.2018 | 31.12.2017 | 31.12.2016 | 31.12.2015 |
|-------------------|--------------------|------------|------------|------------|------------|------------|------------|
| Ongoing proced | Ongoing procedures | | 2 | 4 | 2 | 4 | 2 |
| Certified centre | es | 245 | 243 | 237 | 234 | 230 | 228 |
| | | | | | | | |
| Certified clinica | l sites | 284 | 282 | 280 | 280 | 280 | 279 |
| BCC with | 1 clinical site | 210 | 209 | 199 | 193 | 186 | 183 |
| | 2 clinical sites | 33 | 31 | 35 | 38 | 40 | 41 |
| | 3 clinical sites | 0 | 1 | 1 | 1 | 2 | 2 |
| | 4 clinical sites | 2 | 2 | 2 | 2 | 2 | 2 |

Included clinical sites

| | Locations DKG & NRW | DKG Breast Cancer Centres | | | | | |
|--|---------------------|---------------------------|------------|------------|------------|------------|------------|
| | 31.12.2020 | 31.12.2020 | 31.12.2019 | 31.12.2018 | 31.12.2017 | 31.12.2016 | 31.12.2015 |
| Sites considered in the annual report | 299 | 280 | 276 | 278 | 275 | 275 | 275 |
| corresponds to | - | 98.6% | 97.9% | 99.3% | 98.2% | 98.2% | 98.6% |
| | | | | | | | |
| Primary cases total* | 65.356 | 60.752 | 57,589 | 55,715 | 54,385 | 53,837 | 52.965 |
| Primärfälle pro Standort (Mittelwert)* | 218.6 | 217 | 209 | 200 | 198 | 196 | 193 |
| Primärfälle pro Standort (Median)* | 182 | 182 | 180.5 | 178 | 175 | 177 | 169 |

| Brustzentren NRW | 31.12.2020 |
|---------------------------------------|------------|
| Sites considered in the annual report | 19 |
| Primary cases total* | 4,604 |
| Primary cases per site (mean)* | 242 |
| Primary cases per site (median)* | 171 |

^{*}The figures are based on the clinical sites listed in the Annual Report.

This annual report looks at the breast cancer centres certified in the certification system of the German Cancer Society (DKG) and, for the first time from 2021, breast centres in the state of NRW that participate in the DKG's data management. The basis for the diagrams in the annual report is the data sheet. The indicators published here refer to the indicator year 2019. They represent the assessment basis for the audits carried out in 2020.

DKG Breast Cancer Centres:

The annual report includes 280 of the 284 DKG-certified centre sites. Excluded are 4 sites that were certified for the first time in 2020 (data mapping of complete calendar year not mandatory for first-time certifications). The DKG-certified sites that are also NRW-certified (= 19 sites) are a subset of the 280 sites. A total of 61,356 primary breast cancer cases were treated at all 284 sites.

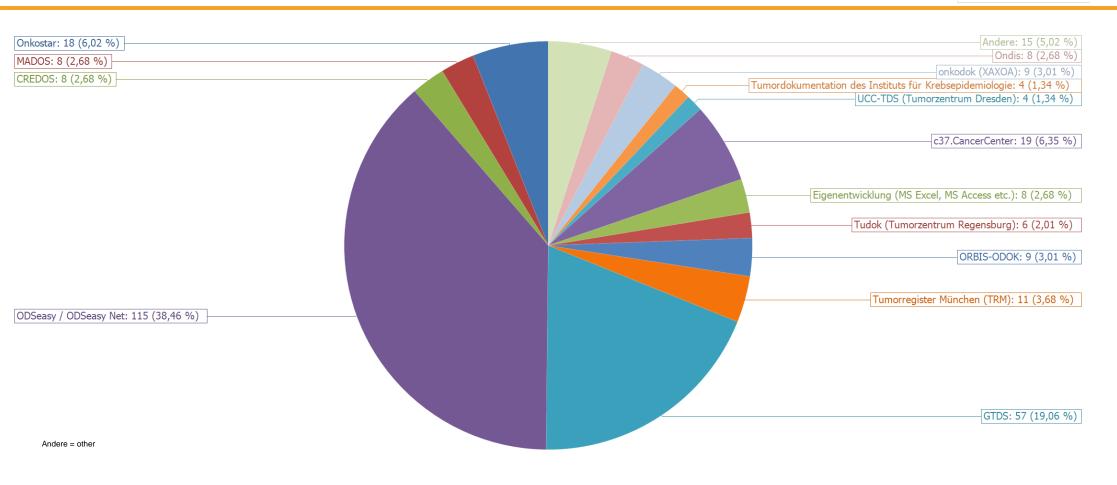
Breast centres NRW:

Included in the annual report are 19 centre sites in the state of NRW that participate in the DKG's data management. A total of 4,604 primary cases of breast carcinoma were treated at the 19 sites.

A current overview of all sites is shown at www.oncomap.de. Using the filter "Certificate", a common view or a view separated according to certified and recognised sites can be selected. Translated with www.DeepL.com/Translator (free version)



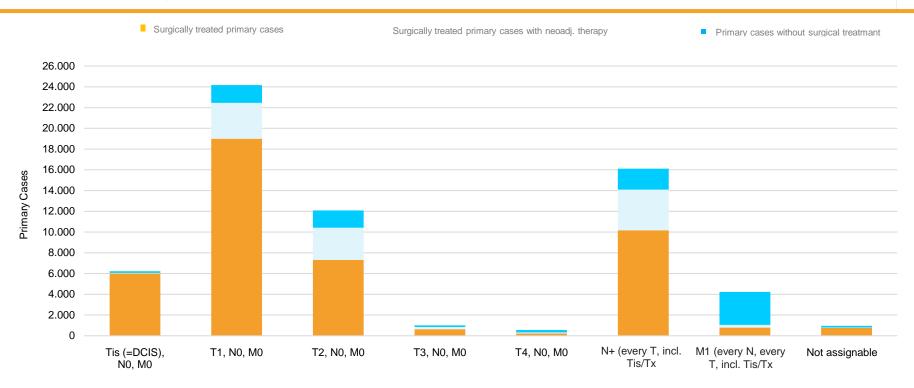
Tumour documentation systems used in Breast Cancer Centres



| Legend | |
|--------|-----------------------------------|
| Others | System used in < 4 clinical sites |

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

Basic data – Primary Cases Breast Cancer



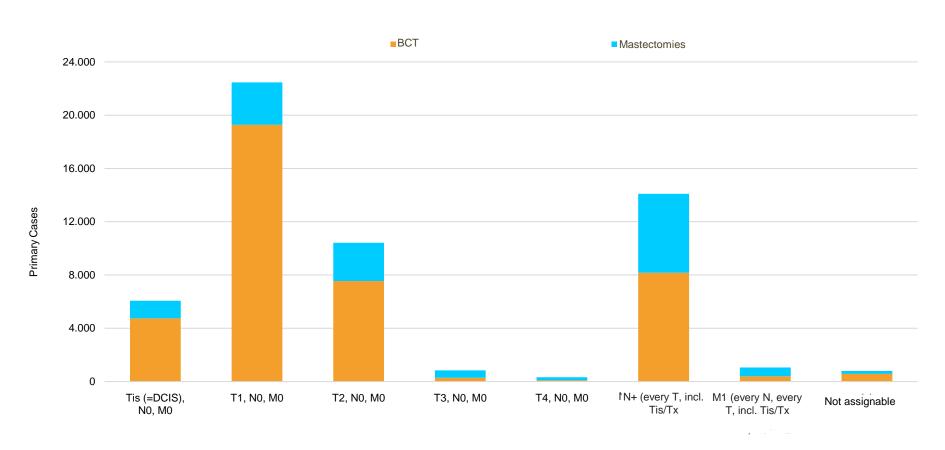
| | Tis (=DCIS), NO, MO | T1, N0, M0 | T2, N0, M0 | T3, N0, M0 | T4, N0, M0 | N+ (every T incl. Tis/Tx), M0) | M1 (every N, every T incl. Tis/Tx) | Not assignable* | Total |
|--|------------------------|-----------------|----------------|--------------|--------------|-----------------------------------|--|--------------------|--------|
| Non-surgical primary cases | 163 (2.62%) | 1,711 (7.08%) | 1,661 (13.74%) | 163 (16.17%) | 232 (41.73%) | 2,026 (12.57%) | 3,176 (75.06%) | 157 (16.44%) | 9,289 |
| Primary cases Surgery with neoadj. Th.** | 55 (0.88%) | 3,454 (14.29%) | 3,112 (25.75%) | 211 (20.93%) | 109 (19.60%) | 3,929 (24.37%) | 264 (6.24%) | 32 (3.35%) | 11,166 |
| Primary cases without neoadj. Th.*** | 6,010 (96.50%) | 19,008 (78.63%) | 7,312 (60.50%) | 634 (62.90%) | 215 (38.67%) | 10,165 (63.06%) | 791 (18.70%) | 766 (80.21%) | 44,901 |
| Primary cases Total | 6,228 | 24,173 | 12,085 | 1,008 | 556 | 16,120 | 4,231 | 955 | 65,356 |

^{*}others: e.g. T1, N0, Mx

^{**} primary cases operated with neo-adjuvant or pre-operative systemic therapy

^{***} primary cases operated without neo-adjuvant or pre-operative systemic therapy

Basic data – Distribution of surgically treated primary cases



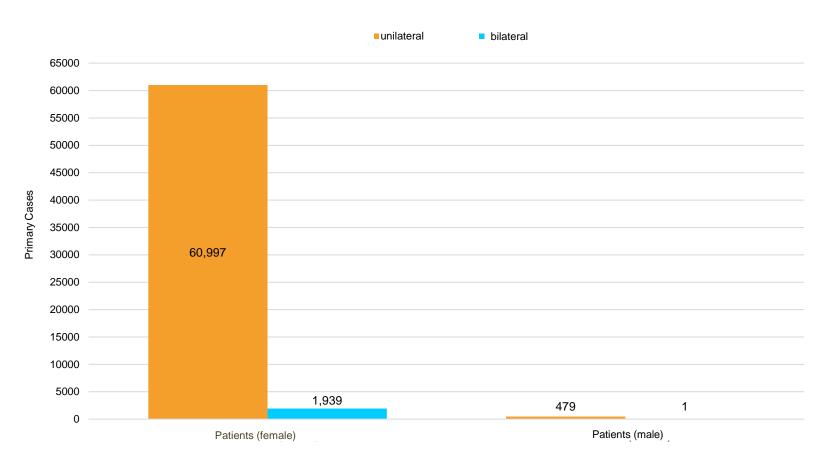
| | Tis (=DCIS), N0, M0 | T1, N0, M0 | T2, N0, M0 | T3, N0, M0 | T4, N0, M0 | N+ (every T incl. Tis/Tx), M0) | M1 (every N, every T incl. Tis/Tx) | Not assignable* | Total |
|---|------------------------|-----------------|----------------|--------------|--------------|--------------------------------------|--|--------------------|--------|
| Mastectomies | 1.321 (21.78%) | 3,188 (14.19%) | 2,883 (27.66%) | 563 (66.63%) | 227 (70.06%) | 5,928 (42.06%) | 661 (62.65%) | 226 (28.32%) | 14,997 |
| ВСТ | 4,744 (78.22%) | 19,274 (85.81%) | 7,541 (72.34%) | 282 (33.37%) | 97 (29.94%) | 8,166 (57.94%) | 394 (37.35%) | 572 (71,68%) | 41,070 |
| Surgically treated Primary cases Total | 6,065 | 22,462 | 10,424 | 845 | 324 | 14,094 | 1,055 | 798 | 56,067 |

* Not assignable: e.g. T1, N0, Mx

Not assignable. e.g. 11, No., IVIX

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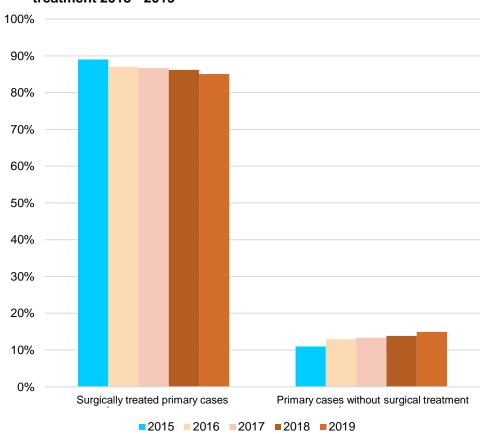
Basic data – Gender distributuon



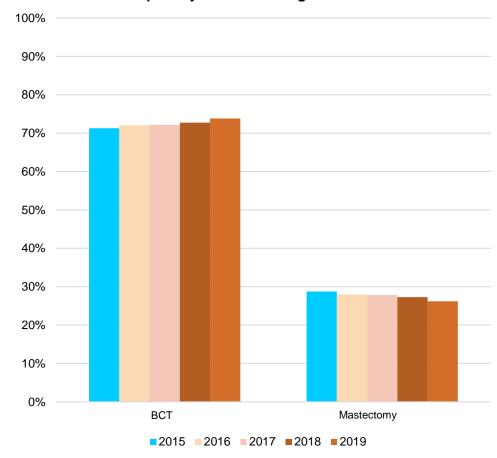
| | Female patients | Male patients | Primary cases Total | |
|--------------------------|-------------------------|---------------|---------------------|--|
| unilateral | 60,997 (96.92%) | 479 (99.79%) | 61.476 | |
| Bilateral (simultaneous) | 1,939 (3.08%) 1 (0.21%) | | 3,880 | |
| | | | 65,356 | |
| Total | 62,936 | 480 | | |

Basic data – Development 2015 - 2019

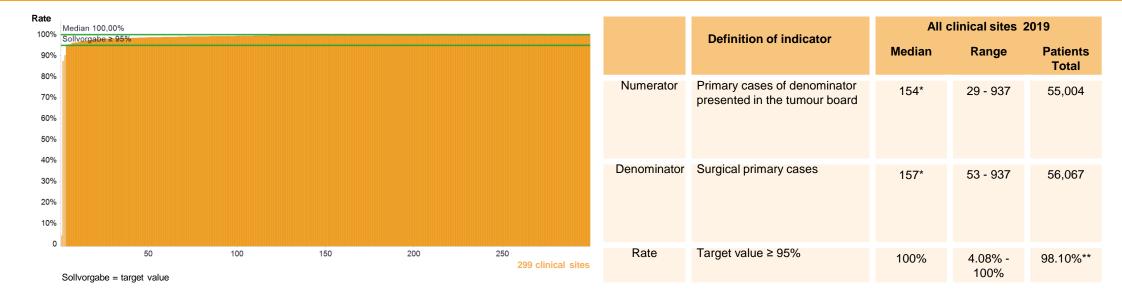
Distribution of primary cases with surgical vs. non-surgical treatment 2015 - 2019

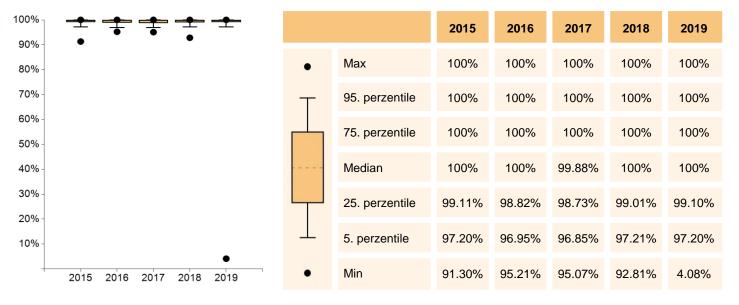


Distribution of primary cases with surgical treatment 2015 - 2019



1. Post-operative case review





| Clinical sites evaluable dat | | Clinical sites meeting the target | | | |
|------------------------------|----------|-----------------------------------|--------|--|--|
| Number | Number % | | % | | |
| 299 | 100.00% | 296 | 99.00% | | |

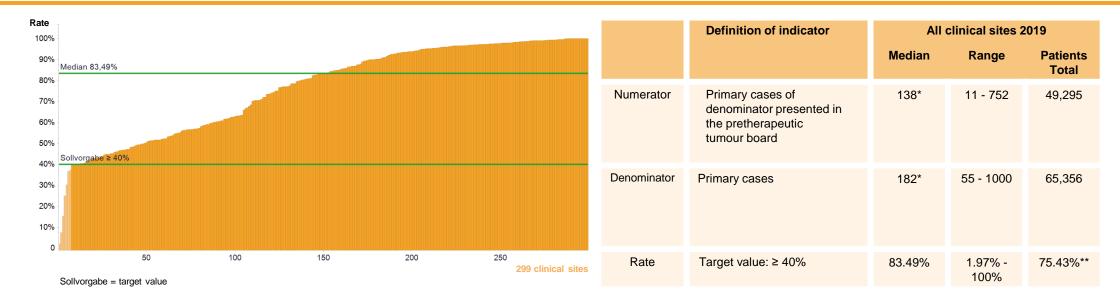
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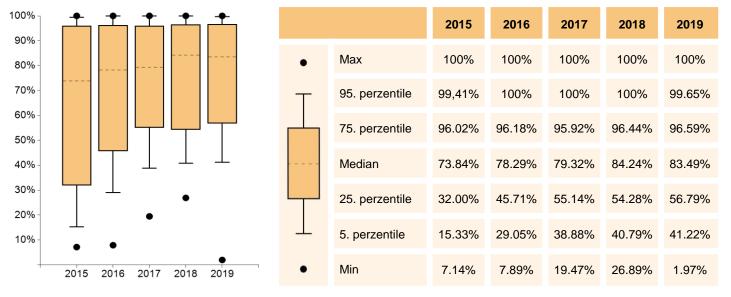
The indicator continues to be implemented very well by the centres.3 centres failed to meet the target. The background for this and another centre was that the patients were presented, but this was not indicated in the tumour documentation system. The centres then initiated adjustments in the documentation process. In another case, a surgeon had referred patients back to the referring physician directly after the operation without presenting them. Here, too, the processes were corrected and extended control options were created by the case management.

^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

2. Pretherapeutic case discussion





| Clinical sites evaluable dat | | Clinical sites meeting the target | | | |
|------------------------------|----------|-----------------------------------|--------|--|--|
| Number | Number % | | % | | |
| 299 | 100.00% | 292 | 97.66% | | |

Comment

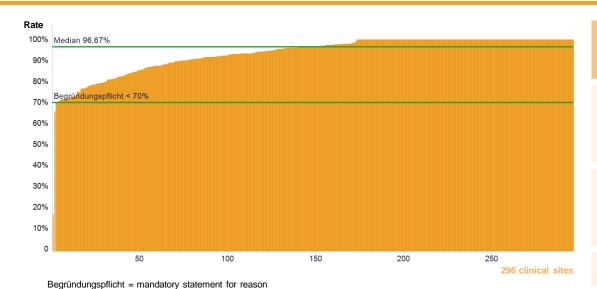
Over the years, a pleasing development can be observed, which continues in the indicator year 2019. Only 7 centres (previous year: 8) presented less than 40% of primary case patients pre-therapeutically. The most frequent reason for falling short of this indicator was that there were few guidelines for presentation, e.g. only patients with neoadjuvant chemotherapy or primary metastatic patients were presented. Here, the audits worked towards broader presentation criteria. The centre with the lowest rate had inadvertently documented the presentation only in the HIS and not in the TuDok system.

^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

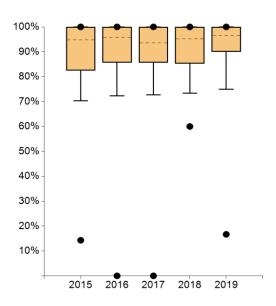
^{**} Percentage of total patients treated in centers according to the numerator.



3. Discussions of cases involving local recurrence/metastases



| | Definition of indicator | All clinical sites 2019 | | |
|-------------|---|-------------------------|------------------|-------------------|
| | | Median | Range | Patients Total |
| Nominator | Patients of the dimoniator presented in the tumour board | 27* | 1 - 191 | 10,113 |
| Denominator | Patients with first local recurrence and/or first remote metastasis (without primary M1 pat.) | 29* | 2 - 194 | 10,863 |
| Rate | Mandatory statement of reasons*** <70% | 96.67% | 16.67% - 100% | 93.10%** |





| Clinical sites with evaluable data | | Clinical sites meeting the plausablitly limit | | |
|------------------------------------|--------|---|--------|--|
| Number | % | Number | % | |
| 296 | 99.00% | 294 | 99.32% | |

Comment

The median shows a further positive development in the case review of local recurrences and metastases. 123 centres succeeded in a complete presentation. Only 2 centres were below the plausibility limit. They stated that patients were inadvertently not presented by a cooperation partner and that some patients presented were not mapped in the TuDok system. These problems were countered with quality circles and regular exchanges between the documentalist and the centre.

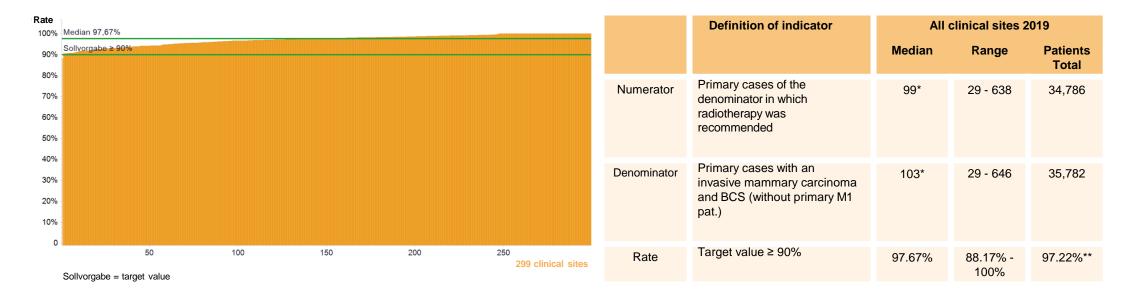
The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

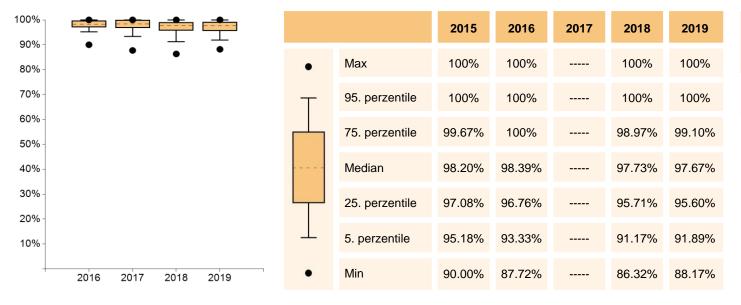
^{**} Percentage of total patients treated in centers according to the numerator

^{***} For values outside the plausibility limit(s), the centers are required to provide a justification..



4. Radiotherapy after BCT in the case of invasive mammary carcinoma (GL QI 7)





| Clinical sites with evaluable data | | Clinical sites meeting the target | | |
|------------------------------------|---------|-----------------------------------|--------|--|
| Number % | | Number | % | |
| 299 | 100.00% | 298 | 99.67% | |

Comment

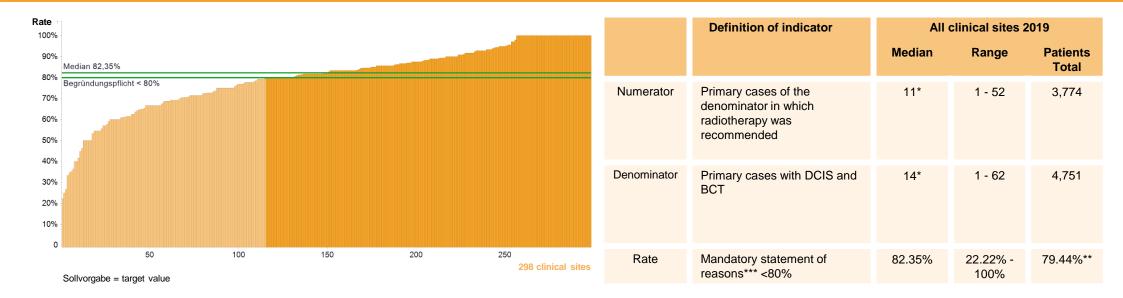
The centres continue to implement the indicator very well. 1 centre fell short of the target of 90%. In some cases (small findings and G1/G2), no recommendation for radiotherapy was made after consideration of the individual case, or the patients did not show up for the appointment or refused any further therapy. The definition of the numerator for the 2017 indicator year recorded radiotherapy actually carried out, so that this is not used for comparison according to the current definition.

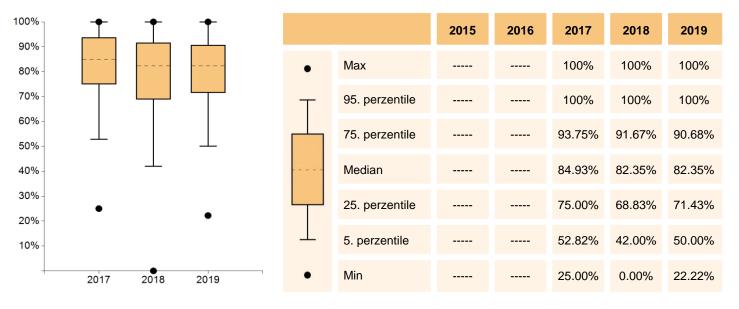
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

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5. Radiotherapy after BCT in the case of DCIS





| Clinical sites with evaluable data | | Clinical sites meeting the target | | |
|------------------------------------|--------|-----------------------------------|--------|--|
| Number | % | Number | % | |
| 298 | 99.67% | 183 | 61.41% | |

Comment

Especially in the lower percentage ranges, the results have improved. 115 centres had to justify in the audit why they had fallen below a rate of 80%. In most cases, the patients had refused radiation, it was not recommended due to favourable prognosis factors (e.g. DCIS, size, grading, resection margin), a mastectomy or resection was recommended instead, a second diagnosis was leading to therapy or there was no information about the externally performed radiation. This could be checked for plausibility in the audits.

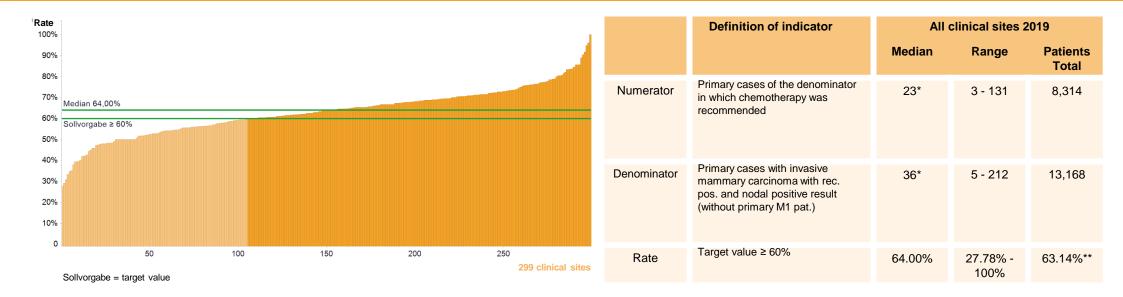
The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

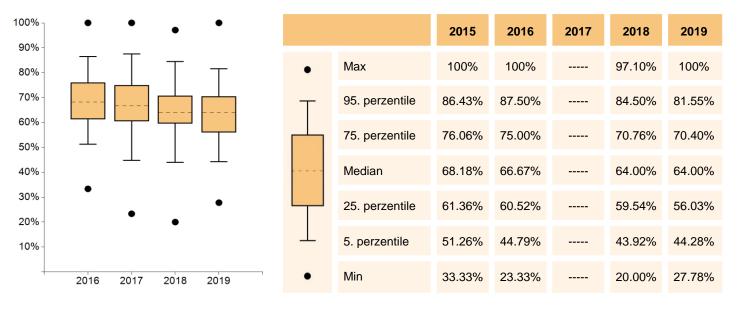
^{**} Percentage of total patients treated in centers according to the numerator

^{***} For values outside the plausibility limit(s), the centers are required to provide a justification..

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6. Chemotherapy in the case of rec. pos. and nodal pos. result





| Clinical sites with evaluable data | | Clinical sites meeting the target | | |
|------------------------------------|---------|-----------------------------------|--------|--|
| Number | % | Number | % | |
| 299 | 100.00% | 194 | 64.88% | |

Comment

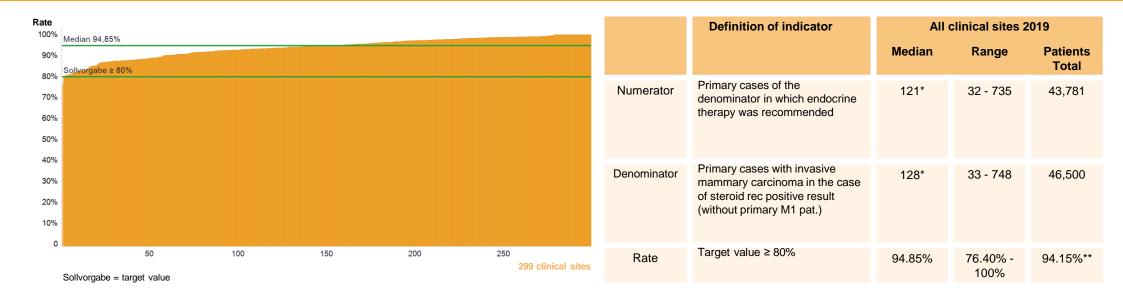
The fulfilment of this indicator is at the previous year's level. A good third (105) of the centres failed to meet the target of at least 60%. In the vast majority of cases, this was due to old age, poor general condition and/or comorbidities. In many cases, chemotherapy was also dispensed with due to the favourable tumour biology (after carrying out a gene expression analysis). The results of 2017 are excluded from the previous year's comparison due to a different definition of the numerator (chemotherapies actually carried out).

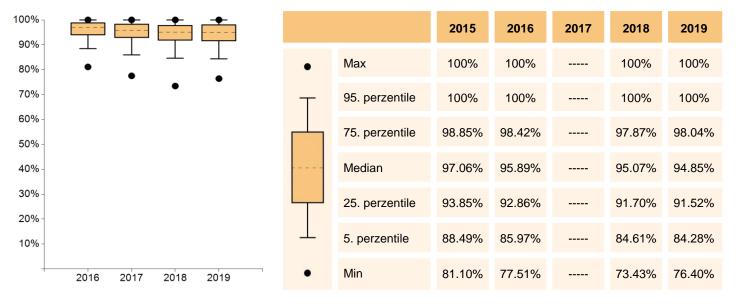
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.



7. Endocrine therapy in the case of steroid rec. positive result (QI GL 8)





| Clinical sites with evaluable data | | Clinical sites meeting the target | | |
|------------------------------------|---------|-----------------------------------|--------|--|
| Number | % | Number | % | |
| 299 | 100.00% | 298 | 99.67% | |

Comment

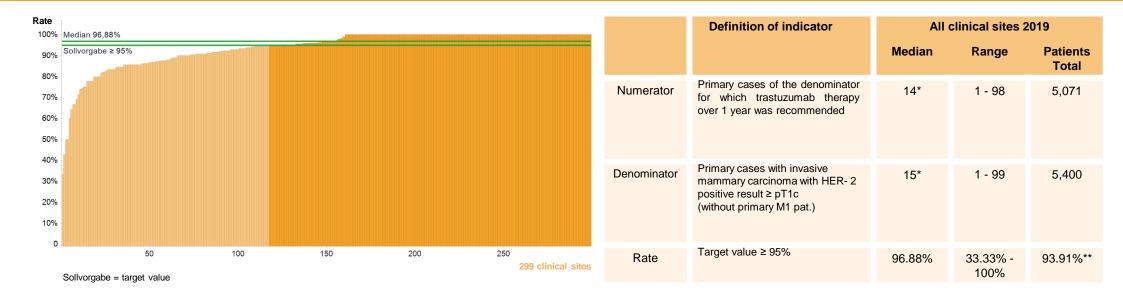
Just under 95% of the denominator's patients received endocrine therapy in the 2019 treatment year, which is roughly the same level as in previous years. Only 1 centre fell just short of the target of over 80%. The reasons given in the individual case analysis (patient's wish, old age, surgical therapy not yet completed, etc.) were plausible in the audit. The results from 2017 are also missing for this indicator (at that time, only endocrine therapies actually performed were included in the numerator).

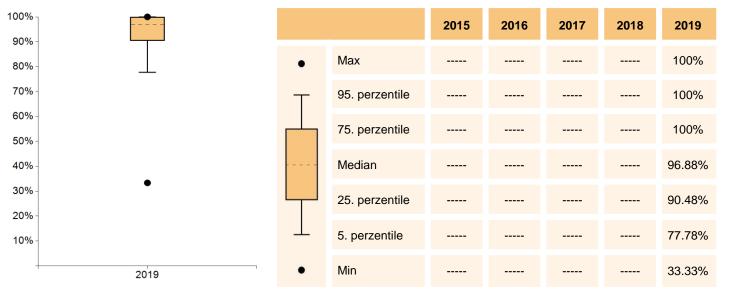
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.



8. Trastuzumab therapy over 1 year in the case of HER-2 pos. result (GL QI 9)





| Clinical sites with evaluable data | | Clinical sites meeting the target | | |
|------------------------------------|---------|-----------------------------------|--------|--|
| Number | % | Number | % | |
| 299 | 100.00% | 182 | 60.87% | |

Comment

Due to the changed denominator definition (previously without target ≥pT1c), a comparison with previous years is not possible. 182 centres failed to meet the target of at least 95%. In almost all cases, old age, poor general condition and/or comorbidities were the reason for not recommending trastuzumab therapy. In one case, the auditor issued a remark stating that age alone should not be a reason for excluding therapy. Other, sporadically given reasons (e.g. second carcinoma leading to therapy, rejection by patient) played a quantitatively subordinate role.

^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

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Patients

Total

4,251

5,086

83.58%**

All clinical sites 2019

Range

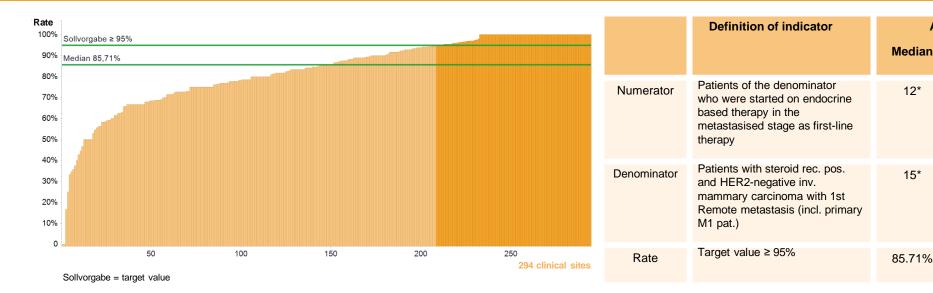
0 - 64

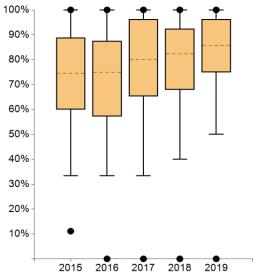
1 - 71

0.00% -

100%

9. Endocrine therapy for metastasis (GL QI 4)







| Clinical sites with evaluable data | | Clinical sites meeting the target | | |
|------------------------------------|--------|-----------------------------------|--------|--|
| Number | % | Number | % | |
| 294 | 98.33% | 86 | 29.25% | |

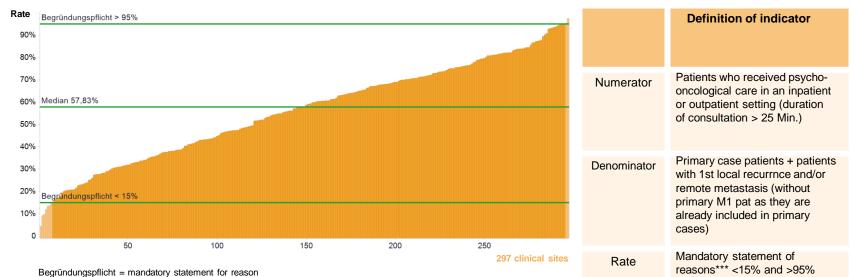
Comment

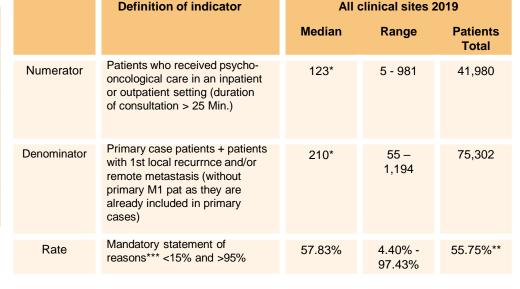
The rate of endocrine first-line therapy for first metastasis increases continuously over the years. Nevertheless, only just under 30% of the centres achieve the target of at least 95%. The audits showed that this was mainly due to high therapy pressure in the case of extensive metastasis, rejection by the patients and death before the start of endocrine therapy. In addition, sometimes only best supportive care was possible or the tumour was only very weakly hormone receptor positive. The reasons given were plausible in the audits.

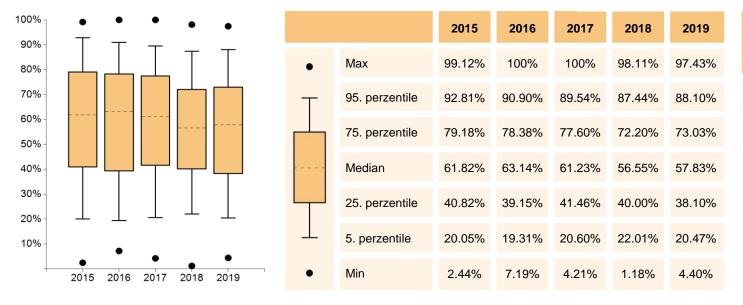
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

10. Psycho-oncological care (Consulation >25 min)







| Clinical sites with evaluable data | | Clinical sites meeting the plausablitly limit | | |
|------------------------------------|--------|---|--------|--|
| Number % | | Number | % | |
| 297 | 99.33% | 288 | 96.97% | |

Comment

The rate of psycho-oncological care remains constant and is over 50% of patients overall. 2 centres were even above 95%. 7 centres fell below the quota of 15%, which is accompanied by an obligation to provide justification. They attributed this to low demand on the part of the patients as well as staff shortages, which were countered with training, increased personal contact and new appointments.

The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator

^{***} For values outside the plausibility limit(s), the centers are required to provide a justification..

Certification

Patients Total

52,689

75,302

69.97%**

Range

11 –

1,020

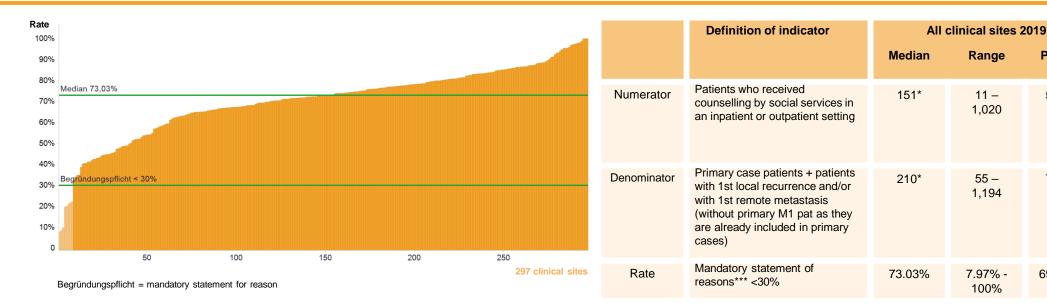
55 -

1,194

7.97% -

100%

11. Counselling social services



| 100% | $\stackrel{\bullet}{\top} \stackrel{\bullet}{} \stackrel{\bullet}{} \stackrel{\bullet}{} \stackrel{\bullet}{} \stackrel{\bullet}{}$ | | | 2015 | 2016 | 2017 | 2018 | 2019 |
|----------------|---|---|----------------|--------|--------|--------|--------|--------|
| 90% - | | • | Max | 100% | 100% | 100% | 97.14% | 100% |
| 70% - | | Т | 95. perzentile | 96.12% | 93.21% | 93.32% | 92.79% | 94.52% |
| 60% - 50% - | | | 75. perzentile | 87.72% | 85.67% | 83.60% | 81.61% | 80.85% |
| 40% - | \perp \perp \mid \perp \perp | | Median | 78.99% | 77.75% | 75.29% | 74.41% | 73.03% |
| 30% - | _ | Image: Control of the | 25. perzentile | 70.02% | 68.22% | 66.16% | 63.07% | 64.68% |
| 20% - 10% - | • | | 5. perzentile | 42.33% | 41.86% | 34.66% | 37.20% | 40.59% |
| | | | Min | 5 Q10/ | 0.00% | 5 220/ | 2 90% | 7.07% |

| Clinical sites with evaluable data | | Clinical sites meeting the plausablitly limit | | |
|------------------------------------|--------|---|--------|--|
| Number % | | Number | % | |
| 297 | 99.33% | 289 | 97.31% | |

A consistently high level can also be observed in social service counselling. Only 8 centres fall under the justification requirement with results below 30%. Of these, 5 are located in Germanspeaking countries, where other responsibilities and benefit entitlements apply. Nevertheless, a social service was established in one case. Other reasons were a low demand on the part of the patients and staff shortages. Overall, the data of the last few years show that the social service is an integral part of the certified breast cancer centres.

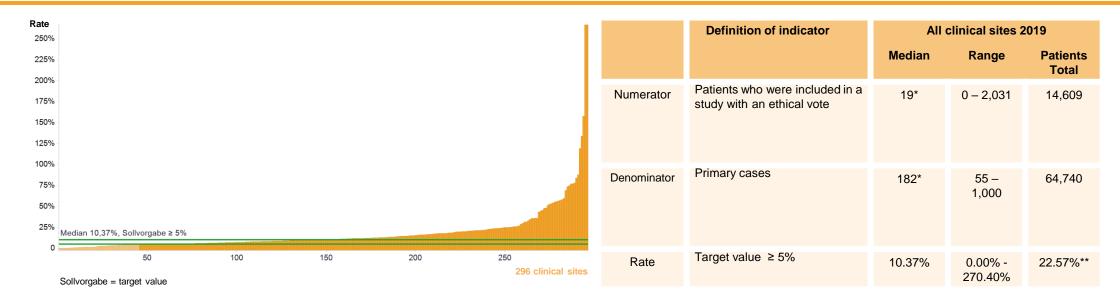
The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

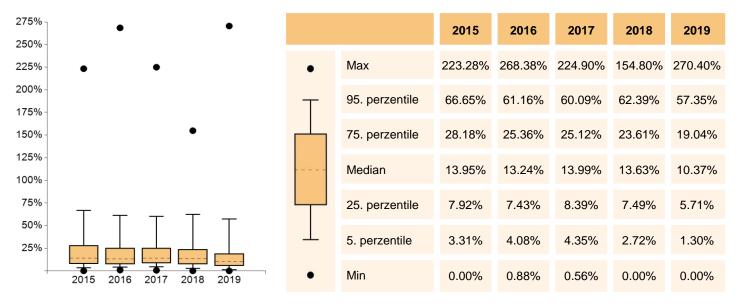
2015 2016 2017 2018 2019

^{**} Percentage of total patients treated in centers according to the numerator

^{***} For values outside the plausibility limit(s), the centers are required to provide a justification...

12. Share of study patients





| Clinical sites with evaluable data | | Clinical sites meeting the target | | |
|------------------------------------|--------|-----------------------------------|--------|--------|
| | Number | % | Number | % |
| | 296 | 99.00% | 251 | 84.80% |

Comment

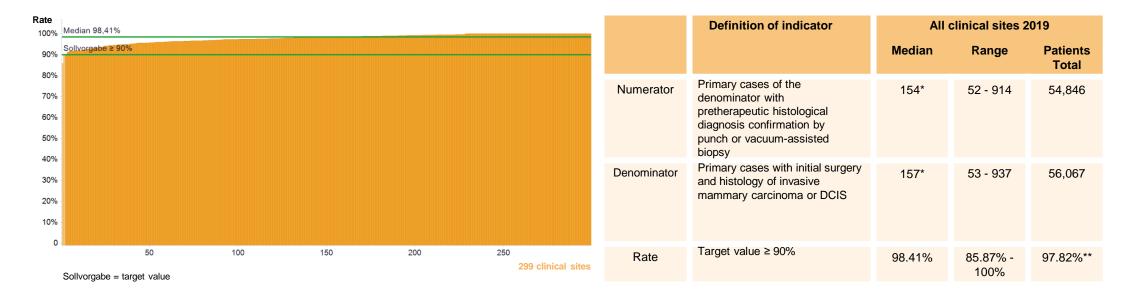
The vast majority of centres succeed in including a number of 5% of primary case patients in a study. Of the 45 centres below the target, only 6 centres did not have a single study patient. Common reasons for low study rates were failure to meet inclusion criteria, lack of human resources, low patient willingness to participate and few suitable studies. The centres tried to improve the situation by increasing the acquisition of studies, planning their own studies, appointing new staff and improving internal study information. In many cases, a higher study quota was therefore foreseeable for the following year.

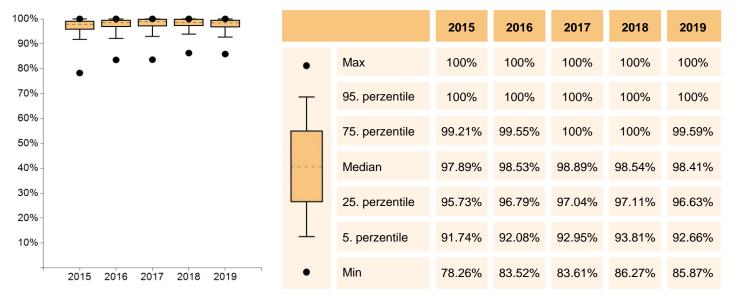
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.



13. Pretherapeutic histological confirmation (GL QI 1)





| Clinical sites with evaluable data | | Clinical sites meeting the target | | |
|------------------------------------|---------|-----------------------------------|--------|--|
| Number | % | Number | % | |
| 299 | 100.00% | 297 | 99.33% | |

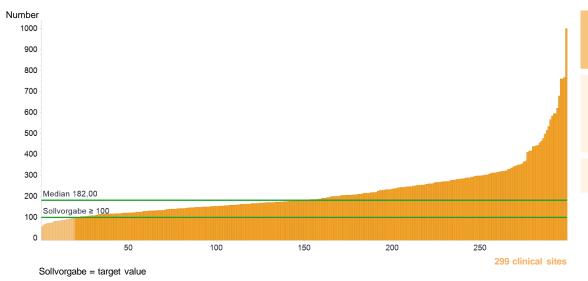
Comment

This guideline indicator is almost completely implemented in the centres. 71 centres have complete pre-therapeutic histological confirmation. Only 2 centres have confirmed slightly less than 90% of the diagnoses of patients of the denominator by means of punch or vacuum biopsy. One of them had already missed the target in previous years. The reason given by both centres was that the patient refused the biopsy, that a biopsy was not possible or that in the case of a bilateral tumour, a bilateral backup was not performed.

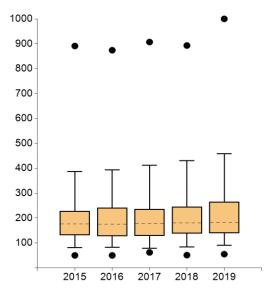
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

14. Primary cases mammary carcinoma



| | Definition of indicator | All clincal sites 2019 | | 019 |
|--------|-------------------------|------------------------|---------------|-------------------|
| | | Median | Range | Patients Total |
| Number | Primary Cases | 182 | 55 – 1,000 | 65,356 |
| | Target value ≥ 100 | | | |





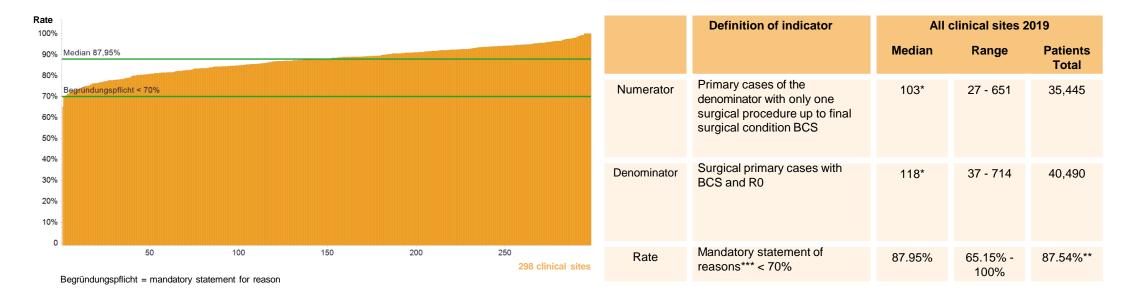
| Clinical sites with evaluable data | | Clinical sites target | meeting the |
|------------------------------------|---------|-----------------------|-------------|
| Number | % | Number | % |
| 299 | 100.00% | 280 | 93.65% |

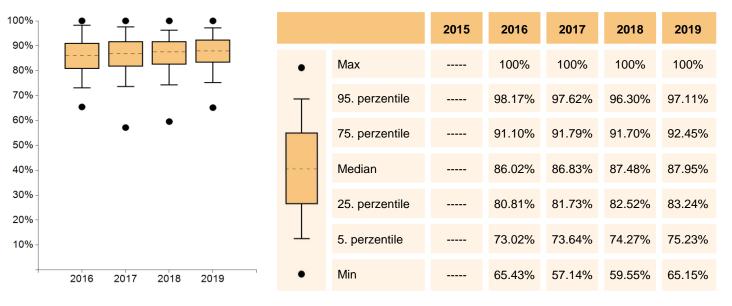
Commen

Due to the first-time inclusion of the NRW breast centres, the primary case number increases significantly by 13.5%. In the year under review, 57,788 patients were treated in the German certified breast cancer centres. Compared to the total incidence in Germany in 2017 (67,944, source: www.krebsdaten.de), this corresponds to a share of 85.1%. Of the 19 sites that did not reach the target of at least 100 primary cases, 15 were protected as multi-site centres (target: at least 50 primary cases per site, at least 150 primary cases in total). The remaining 4 centres were under surveillance audit, so that it was possible to fall short of the number of primary cases.

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15. Number of surgical procedures for R0 resection for BCT





| Clinical sites with evaluable data | | Clinical sites meeting the plausablitly limit | | |
|------------------------------------|--------|---|--------|--------|
| | Number | % | Number | % |
| | 298 | 99.67% | 297 | 99.66% |

Comment

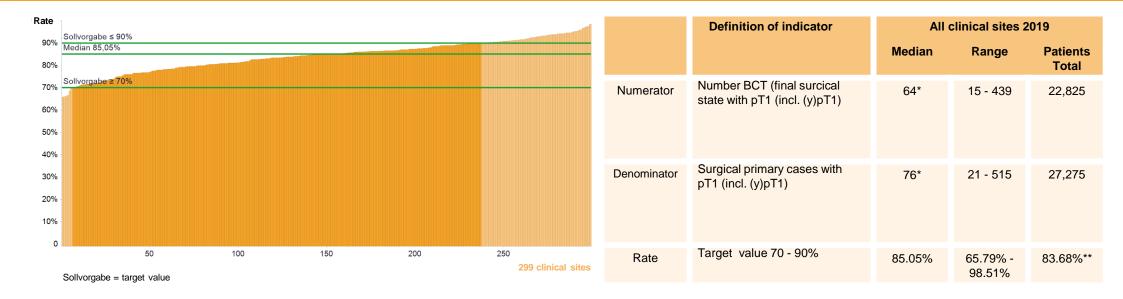
Median and overall rate continue to rise at a high level. Only 1 centre (previous year: 4) is (for the first time) below the limit for the obligation to justify and thus required more than one intervention for the final BET in less than 70% of cases. At this centre, a resection had been necessary in 23 cases. The centre then conducted an internal quality circle. In particular, the indication for BET should be examined more carefully in future in order to alleviate the burden on patients in the event of a post-resection.

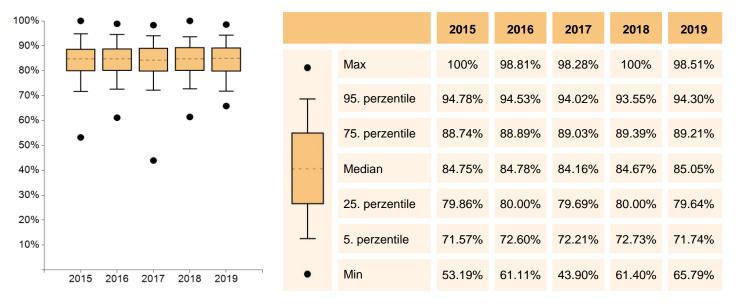
The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator

^{***} For values outside the plausibility limit(s), the centers are required to provide a justification..

16. Breast-conserving procedure for pT1





| Clinical sites with evaluable data | | Clinical sites meeting the target | |
|------------------------------------|---------|-----------------------------------|--------|
| Number | % | Number | % |
| 299 | 100.00% | 231 | 77.26% |

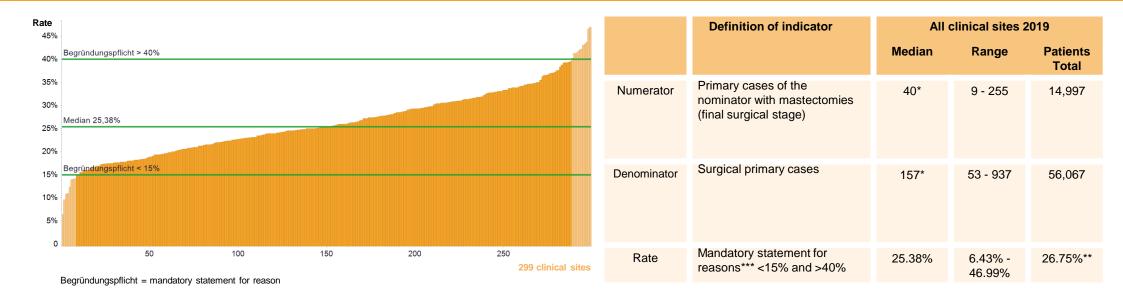
Comment

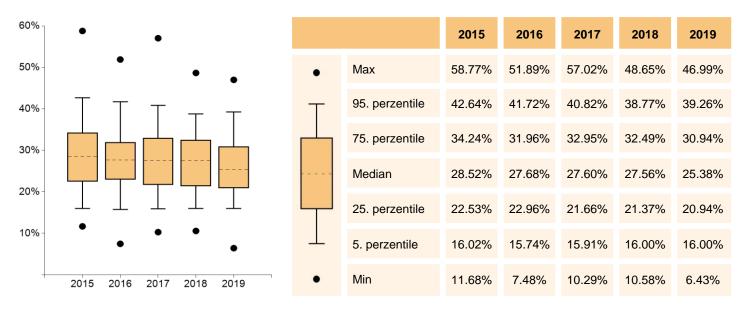
With an almost constant median, the dispersion decreases slightly. Of the 68 centres (previous year: 72) outside the target value, 62 achieved a BET in more than 90% of cases. The centres attributed this to a low proportion of multicentre tumours, the patient's wish, a high proportion of neoadjuvant therapies and comparatively young (screening) patients. Conversely, the 6 centres (previous year: 8) with a rate below 70% claimed, among other things, multicentric carcinomas, the treatment of male patients, extensive DCIS, mastectomy after genetic testing. The results could be plausibilised in the audits.

^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

17. Mastectomies





| Clinical sites with evaluable data | | Clinical sites target | meeting the |
|------------------------------------|---------|-----------------------|-------------|
| Number | % | Number | % |
| 299 | 100.00% | 280 | 93.65% |

Comment

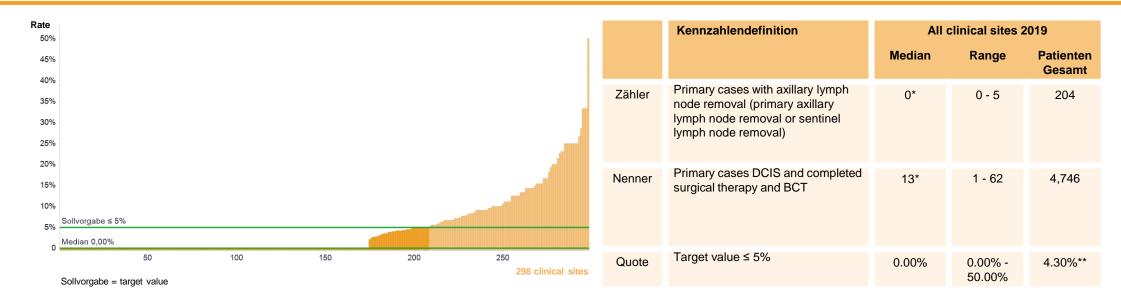
The proportion of mastectomies is steadily decreasing. In the indicator year 2019, 8 centres performed a mastectomy in less than 15% and 11 centres in more than 40% of primary cases. At the level of the individual centre, the proportions of BET and mastectomy correlate negatively with each other, which is why the justifications are largely the same as those for indicator 16.

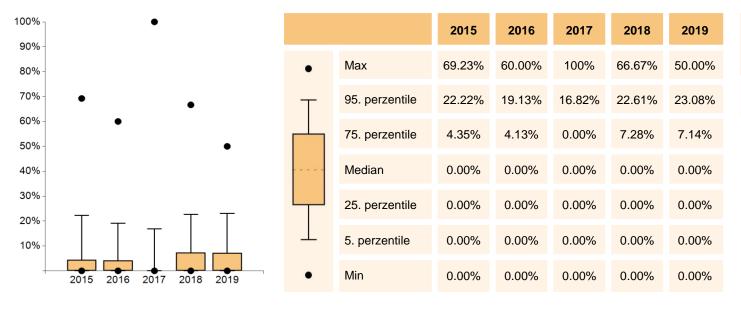
The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator

^{***} For values outside the plausibility limit(s), the centers are required to provide a justification...

18. Lymph node removal in the case of DCIS (GL QI 3)





| Clinical sites with evaluable data | | Clinical sites meeting the target | |
|------------------------------------|--------|-----------------------------------|--------|
| Number | % | Number | % |
| 298 | 99.67% | 208 | 69.80% |

Comment

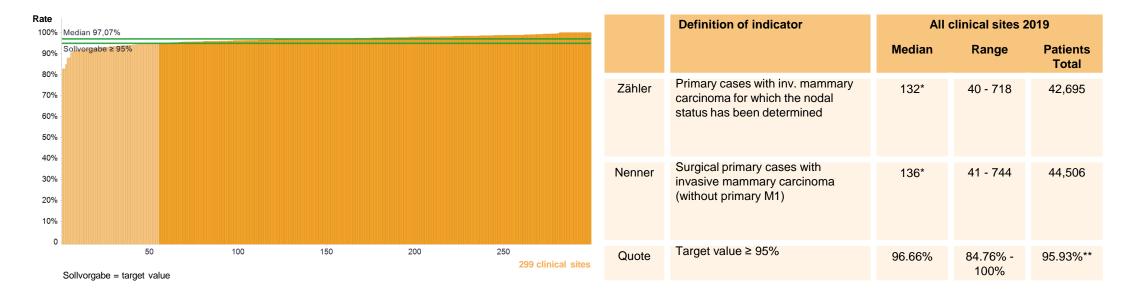
Overall, the proportion of surgical primary cases with DCIS and BET with axillary lymph node removal is decreasing. 174 centres did not perform SNB for DCIS. In contrast, 90 centres (previous year: 94) exceeded the target. In most cases, lymph nodes were removed in the case of suspected invasive parts of DCIS and/or in the case of extensive findings (possibly with an unfavourable position). In some cases, the extensive oncoplasty would have made secondary lymph node removal impossible. In some cases, the patients also wanted the lymph nodes to be removed if there was a high need for safety. Only in one case was a note issued: The central localisation of a DCIS alone is therefore not a reason for lymph node removal.

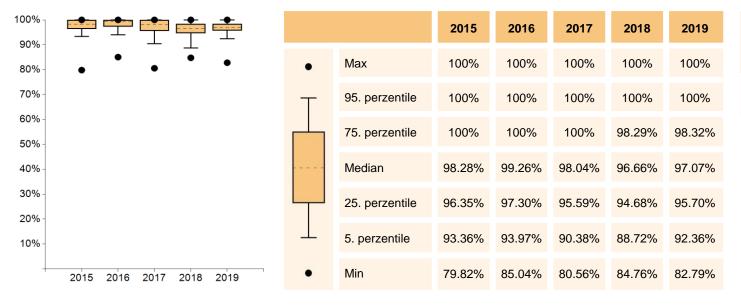
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.



19. Determination of nodal status in case of invasive mammary carcinoma





| Clinical sites with evaluable data | | Clinical sites target | meeting the |
|------------------------------------|---------|-----------------------|-------------|
| Number | % | Number | % |
| 299 | 100.00% | 244 | 81.61% |

Comment

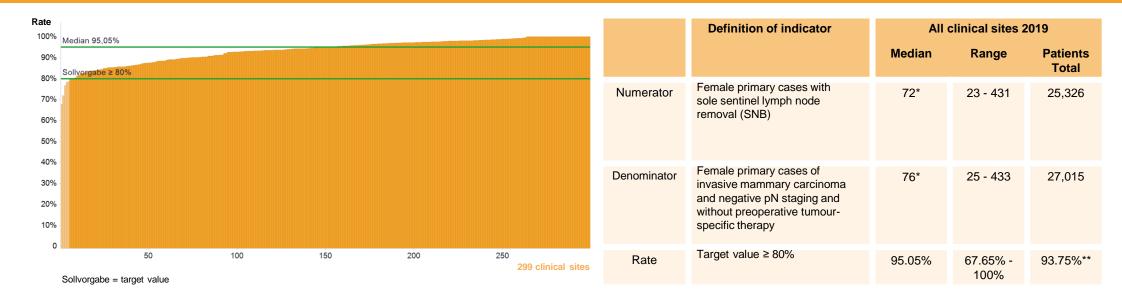
This indicator continues to be met very well by the centres. 54 of them fell (usually just) short of the target of 95%. The reasons for this were made plausible in the audits: In most cases, the nodal status was not determined because the patients refused this, no therapeutic consequence would have resulted in case of old age and/or comorbidities, the lymph nodes were not detectable (e.g. after previous surgery), treatment was according to study protocol (non-SNB arm), a second malignancy was leading therapy or because in individual cases only surgery was performed for cNO. Remarks from the auditors were the exception. In one case, attention was drawn to the fact that age alone is not a reason for dispensing with surgical staging.

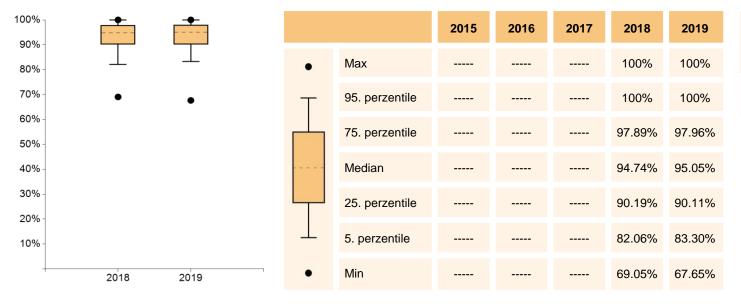
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.



20a. Only sentinel lymphonodectomy (SLNE) for pNO (women) (GL QI 5)





| Clinical sites with evaluable data | | Clinical sites meeting the target | |
|------------------------------------|---------|-----------------------------------|--------|
| Number | % | Number | % |
| 299 | 100.00% | 294 | 98.33% |

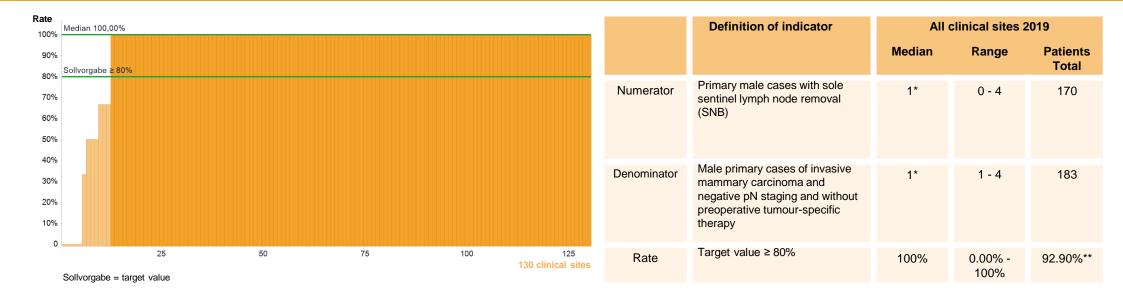
Comment

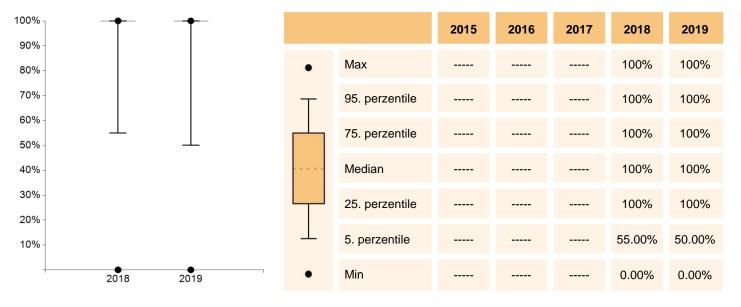
Since the 2018 indicator year, this indicator has been collected on a gender-specific basis. For women, the rate of sole SNB with negative pN staging is better than for men. The 5 centres below the target mostly explained their results by the fact that enlarged, clinically suspicious lymph nodes were also removed. Occasionally, it was also stated that the SNB could not be detected or that only a small number of other lymph nodes were removed. Overall, the breast cancer centres fulfilled the indicator very well.

^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

20b. Only sentinel lymphonodectomy (SLNE) for pNO (men) (GL QI 5)





| Clinical sites with evaluable data | | Clinical sites target | meeting the |
|------------------------------------|--------|-----------------------|-------------|
| Number | % | Number | % |
| 130 | 43.48% | 118 | 90.77% |

Comment

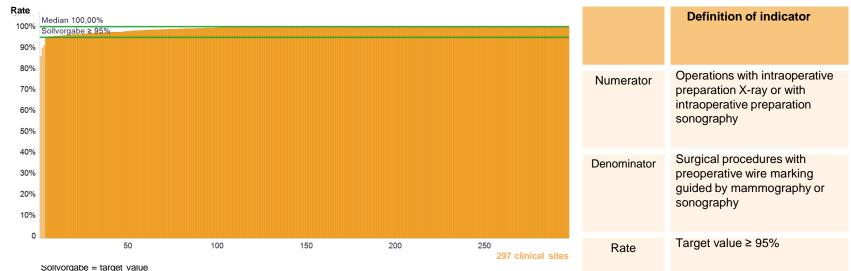
For men, 118 centres achieved a quota of 100%. With 12 centres, more centres fail to meet the target than in KeZa 20a. It should be noted here that the patient numbers in the denominator are considerably lower and that a single case therefore has a greater impact on a centre's quota. The centres concerned justified results below the target with the fact that clinically suspicious lymph nodes were removed, that no lymph node removal was performed due to old age and/or comorbidity, or that patients who needed a walking aid refused the procedure. In the audits, the justifications of the centres could be made plausible.

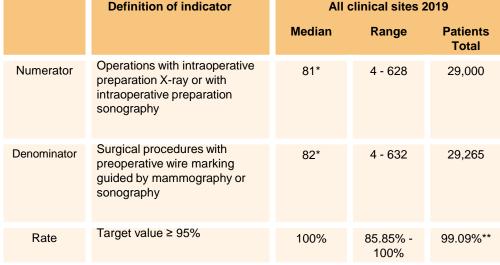
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

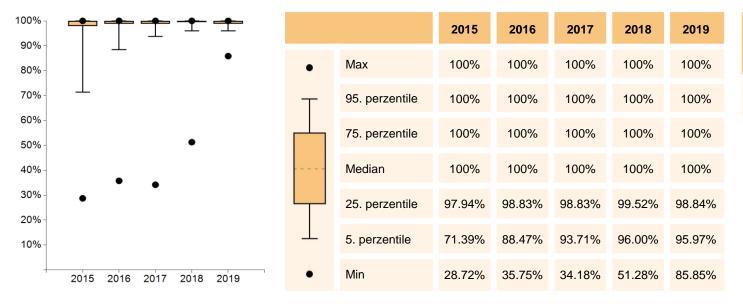
^{**} Percentage of total patients treated in centers according to the numerator.

Certification

21. Intraoperative sample radiography / sonography (GL QI 2)







| Clinical sites with evaluable data | | Clinical sites target | meeting the |
|------------------------------------|--------|-----------------------|-------------|
| Number | % | Number | % |
| 297 | 99.33% | 294 | 98.99% |

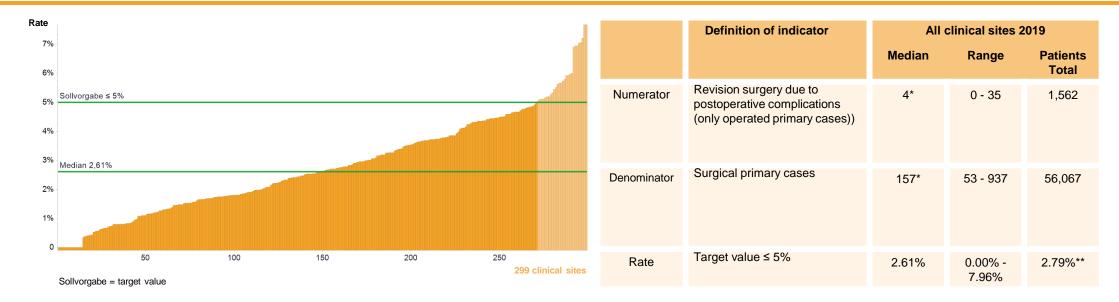
This guideline indicator has shown a very positive development over the years, resulting in only 3 centres (previous year: 7) failing to meet the target in the indicator year 2019. These stated, among other things, that they did not perform intraoperative X-ray or ultrasound examinations because of clearly palpable structures (tumour, lymph nodes). In this case, it was pointed out in the audit that the intraoperative examinations must nevertheless be carried out. Another centre had not yet fully implemented the procedure addressed by the indicator before certification.

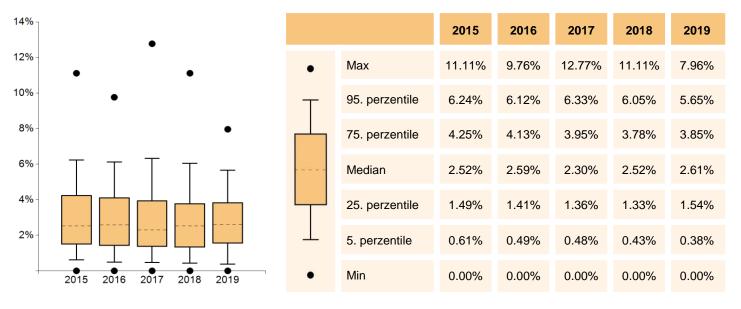
^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

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22. Revision surgeries





| Clinical sites with evaluable data | | Clinical sites meeting the target | |
|------------------------------------|---------|-----------------------------------|--------|
| Number | % | Number | % |
| 299 | 100.00% | 271 | 90.64% |

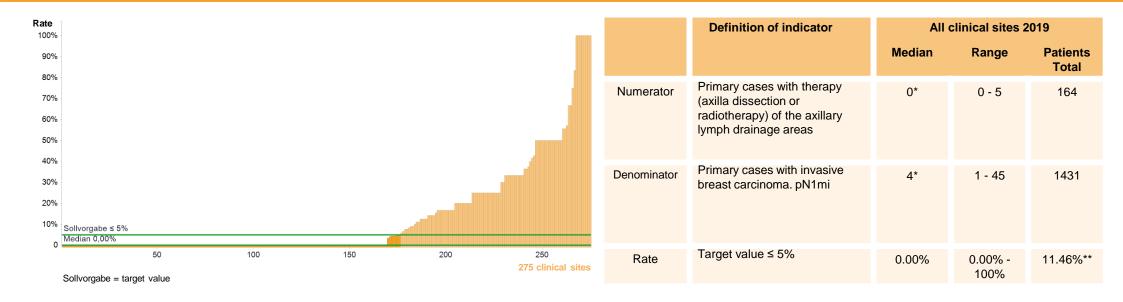
Comment

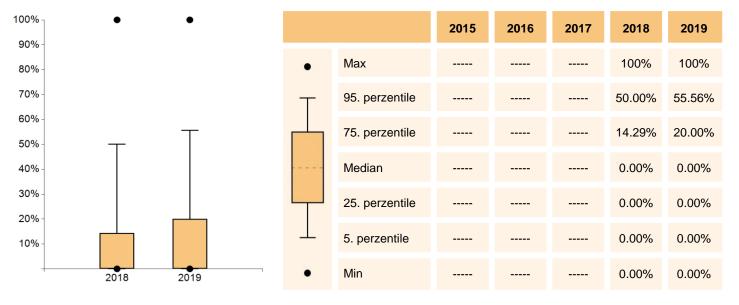
The rate of revision procedures is at the level of the previous year. Once again, 28 centres failed to meet the target of a maximum of 5%. The dominant cause for this was post-operative bleeding or haematoma. In many cases, the centres addressed this with changes in perioperative management (training of surgeons, increased application of compression bandages, improved wound drainage, improved use of anticoagulant or procoagulant drugs, change in surgical technique). This was partly communicated through quality circles. In addition, wound healing disorders, wound infections, necroses and postoperative seromas were reasons for revision surgery.

^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

23. Therapy of the axillary lymphatic drainage for pN1mi (GL QI 6)





| Clinical sites with evaluable data | | Clinical sites meeting the target | |
|------------------------------------|--------|-----------------------------------|--------|
| Number | % | Number | % |
| 275 | 91.97% | 176 | 64.00% |

Comment

169 centres did not treat the axillary lymph drainage areas in pN1mi in any case. In contrast, 99 centres failed to meet the target of max. 5%. The 8 centres with 100% had a maximum of 3 patients in the denominator. The therapy was mostly carried out because the patients were primarily diagnosed as cN+ and therefore received surgery (possibly with neoadjuvant chemotherapy) or radiation. In some cases, the lymph node status was unclear from a sonographic/palpatory/imaging point of view, the patients wanted maximum safety, there were several micrometastases or the therapy was carried out in the case of high-risk carcinomas according to a case-by-case decision. As a rule, the justifications could be plausibilised in the audits. In some cases, quality circles were organised to optimise the indication.

^{*}The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

^{**} Percentage of total patients treated in centers according to the numerator.

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