Annual Report 2020

of the Certified Lung Cancer Centres

Audit year 2019 / Indicator year 2018

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Table of Contents

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General information

Indicator No. 12: 30d ethality after resections..
Indicator No. 13: Post-operative bronchial stump/anastomotic insufficiency...........................
Indicator No. 14: Revision surgeriy ....
Indicator No. 15: Local R0 resections in stages IA/B and IIA/B ....
Indicator No. 16: Local R0 resections in stages IIIA/B ....
Indicator No. 17: Thoracic radiotherapy ....
Indicator No. 18: Pathology reports.............................
Indicator No. 19: Adjuvant cisplatin-containing chemotherapy stages II-IIIA1/2 (GL QI 6).............
Indicator No. 20: Combined radio-chemotherapy in stages IIIA/ IIIB/IIIC (GL QI 7)....................

Quallity 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 of the guidelines programme oncology. Further information: www.leitlinienprogramm-onkologie.de
The quality indicators (QI's) refer to version 1.0 of the S3-LL for prevention, diagnosis, therapy and aftercare of lung cancer (2018).

	Indicator definition	All clinical sites 2014	
		Median	Range
Numerator	Primary cases with stages IB-IIIB after surgical therapy that were presented at the tumour conference	73*	28 - 256
Denominator	Primary cases with stages IB-IIIB after surgical therapy	76*	33 - 266
Rate	Target value ≥ 90%	97.30%	59.57% - 100%

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.
The column Patients Total shows the sum of all patients treated according to the QI and the corresponding quota.

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.

3
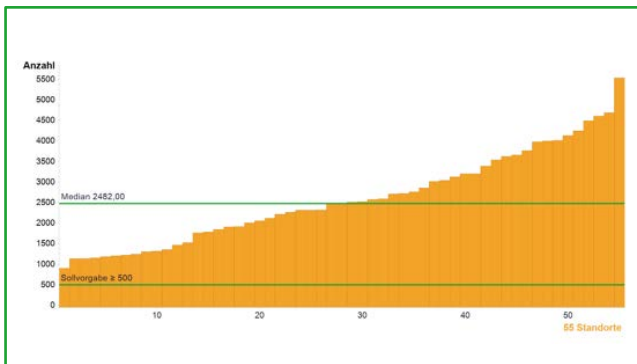
General information
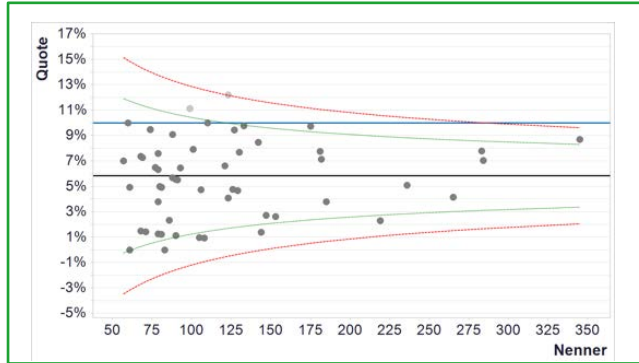
Funnel plots:

The funnel plots indicate the ratio of the number of patients included and the indicator result for the indicators, which are presented as a quotient. The x-axis represents the population of the indicator (numerical value of the denominator), the y-axis the result of the indicator for the respective center. The target value is shown as a blue solid line. The mean value, shown as a black solid line, divides the group into two halves. The green dotted lines represent the 95% confidence intervals (2 standard deviations of the mean value), the red dotted lines the 99.7% confidence intervals (3 standard deviations of the mean value).
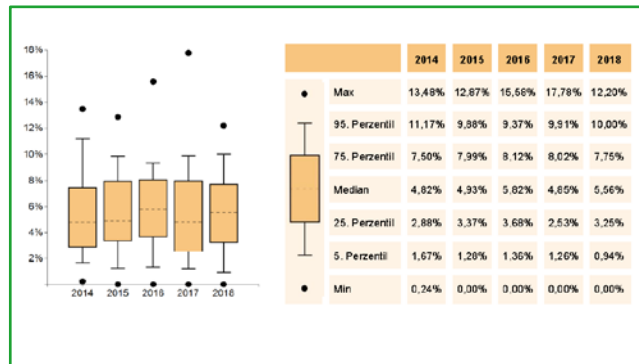
Cohort development:

The **cohort development** in the years **2014, 2015, 2016, 2017** and **2018** is presented in a box plot diagram.
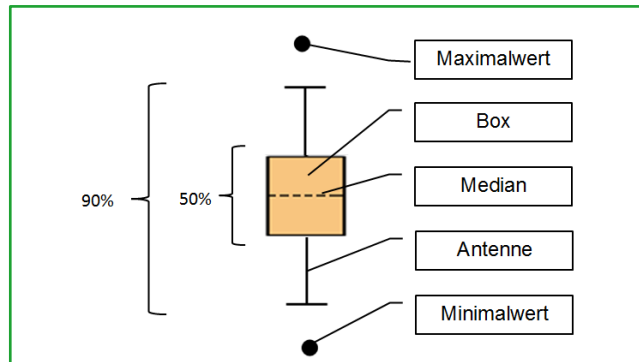
Box plot:

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 for Lung Cancer Centres 2019

	31.12.2019	31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014
Ongoing procedures	4	8	3	5	2	2
Certified centres	59	52	49	45	42	38
Certified clinical sites	75	66	63	53	49	44
Lung cancer centres 1 clinical site	48	42	39	37	35	32
2 clinical sites	7	7	7	8	7	6
3 clinical sites	3	2	2	0	0	0
4 clinical sites	1	1	1	0	0	0

Included certified sites

	31.12.2019	31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014
Centres included in the Annual Report	55	50	46	42	41	37
Equivalent to	93.2%	96.2%	93.9%	93.3%	97.6%	97.4%
Primary cases total*	21,364	19,361	18,483	17,343	16,362	14,623
Primary cases per centre (mean)*	388.4	387.2	401.8	412.9	399.1	395.2
Primary cases per centre (median)*	338.0	335.5	344	351	348	329

* The figures refer to all certified centres in the Annual Report.

This Annual Report looks at the Lung Cancer Centres in the Certification System of the German Cancer Society. The indicator sheet is the basis for the diagrams.

The Annual Report contains the data of 55 of the 59 Lung Cancer Centres. 4 Lung Cancer Centres, certified for the first time in 2019, are not included (data depiction of a full calendar year is not mandatory for initial certifications). In all 59 Cancer Centres a total amount of 22,101 patients has been treated. www.oncomap.de provides an updated overview of all certified centres.

The indicators published here refer to the indicator year 2018. They are the assessment basis for the audits conducted in 2019.

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Tumour documentation systems in the Centre's clinical sites

GTDS: 16 (29,09 %)

Andere: 4 (7,27 %)

ORBIS-ODOK: 2 (3,64 %)

Tudok (Tumorzentrum Regensburg): 2 (3,64 %)

Eigenentwicklung (MS Excel, MS Access etc.): 3 (5,45 %)

KIS-Erweiterung: 3 (5,45 %)

CREDOS: 4 (7,27 %)

Ondis: 4 (7,27 %)

ODSeasy / ODSeasy Net: 7 (12,73 %)

ONKOSTAR: 5 (9,09 %)

c37.CancerCenter: 5 (9,09 %)
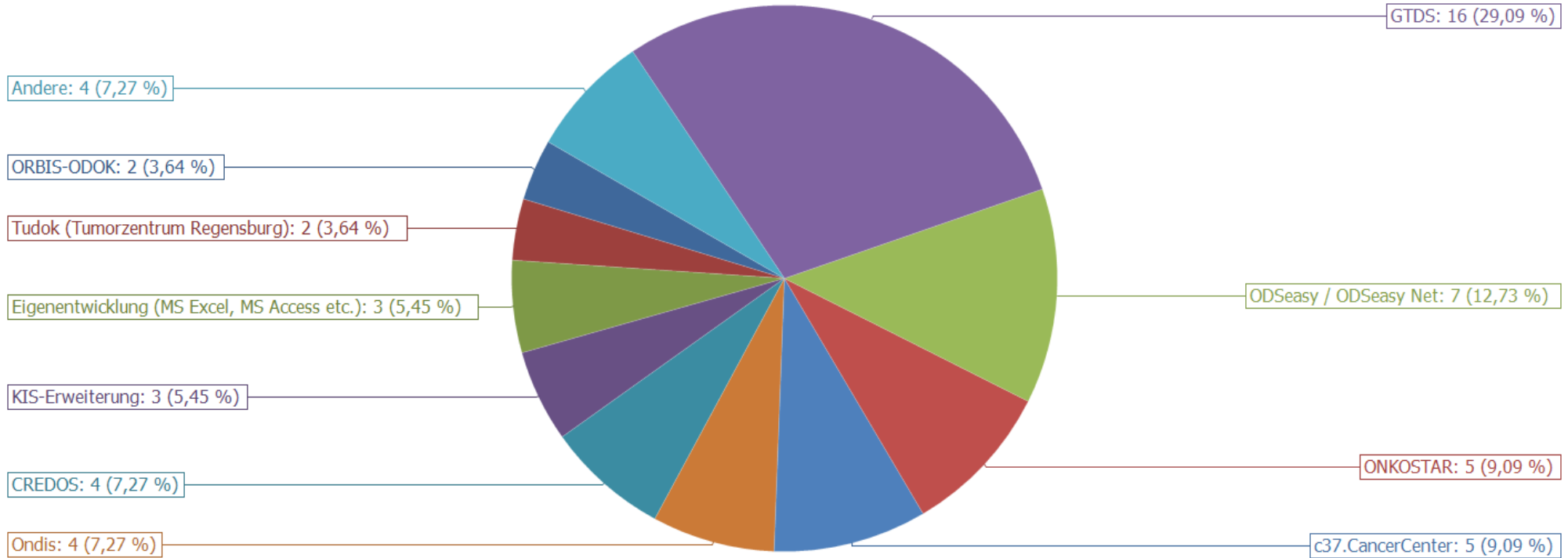
Legend:	
Other	Systems only used at one clinical site

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 depict 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.

Basic data – Stage distribution primary cases lung carcinoma

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Primary cases total
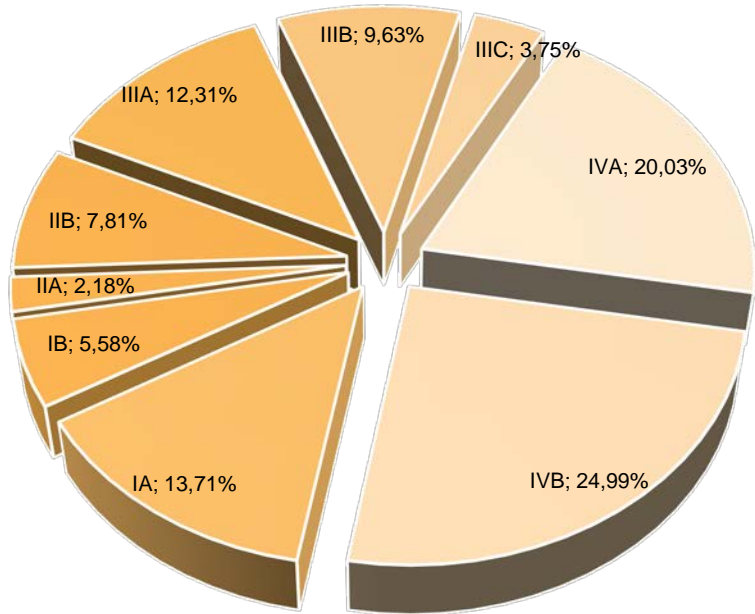
Surgical / non-surgical primary cases
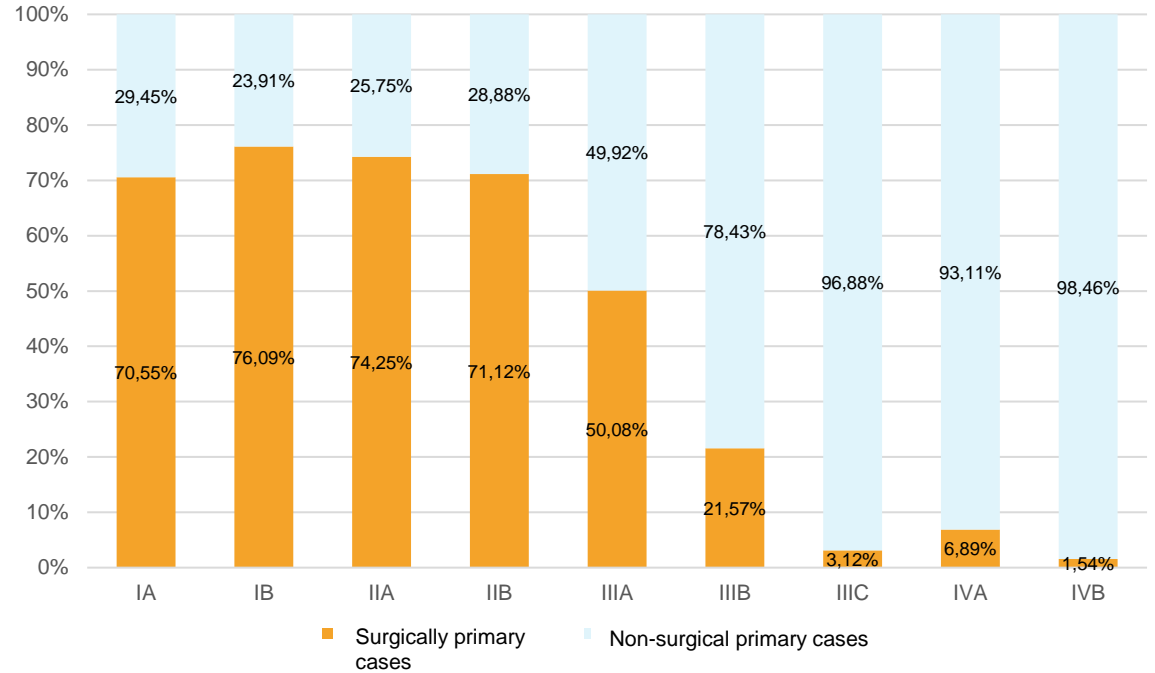
	IA	IB	IIA	IIB	IIIA	IIIB	IIIC	IVA	IVB	Total
Surgical primary cases with anatomical lung resection	2,067 (70.55%)	907 (76.09%)	346 (74.25%)	1,187 (71.12%)	1,317 (50.08%)	444 (21.57%)	25 (3.12%)	295 (6.89%)	82 (1.54%)	6,670
Non-surgical primary cases	863 (29.45%)	285 (23.91%)	120 (25.75%)	482 (28.88%)	1,313 (49.92%)	1,614 (78.43%)	777 (96.88%)	3,984 (93.11%)	5,256 (98.46%)	14,694
Primary cases total	2,930 (13.71%)	1,192 (5.58%)	466 (2.18%)	1,669 (7.81%)	2,630 (12.31%)	2,058 (9.63%)	802 (3.75%)	4,279 (20.03%)	5,338 (24.99%)	21,364 (100%)

Basic data – Development 2014-2018

Stage distribution primary cases 2014-2018

Legend: 2014 2015 2016 2017 2018

Stage distribution surgical primary cases 2014-2018

Legend: 2014 2015 2016 2017 2018
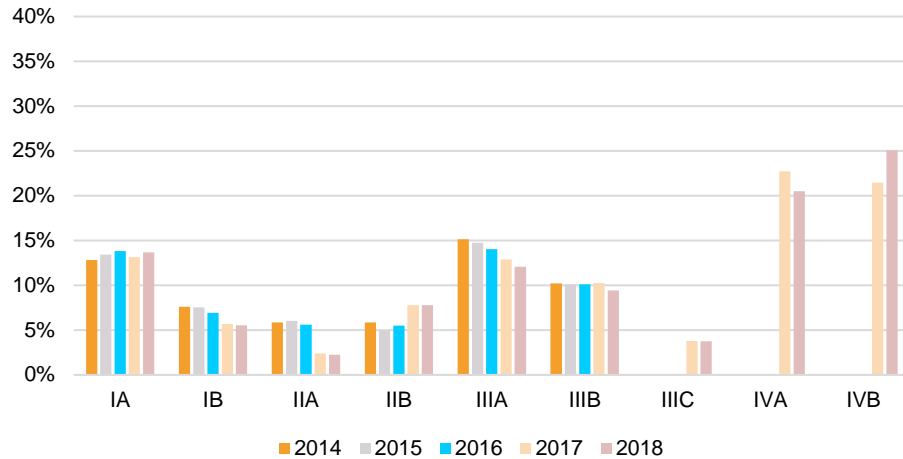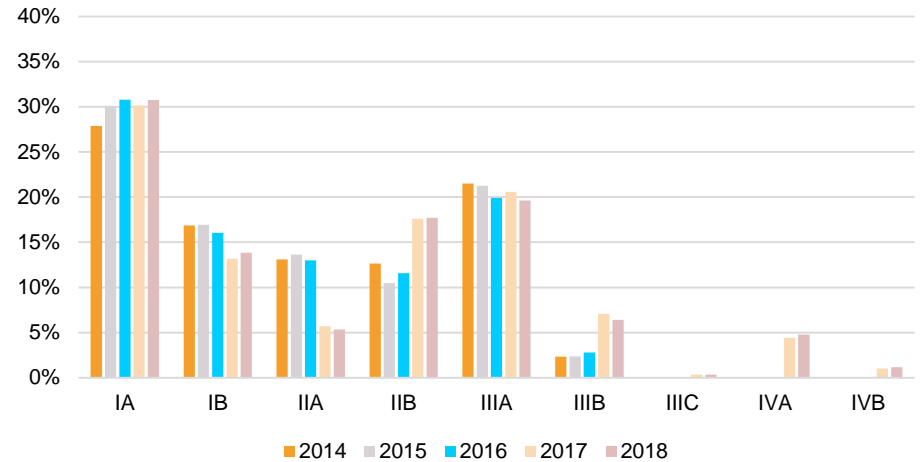
Stage distribution non-surgical primary cases 2014-2018

Legend: 2014 2015 2016 2017 2018
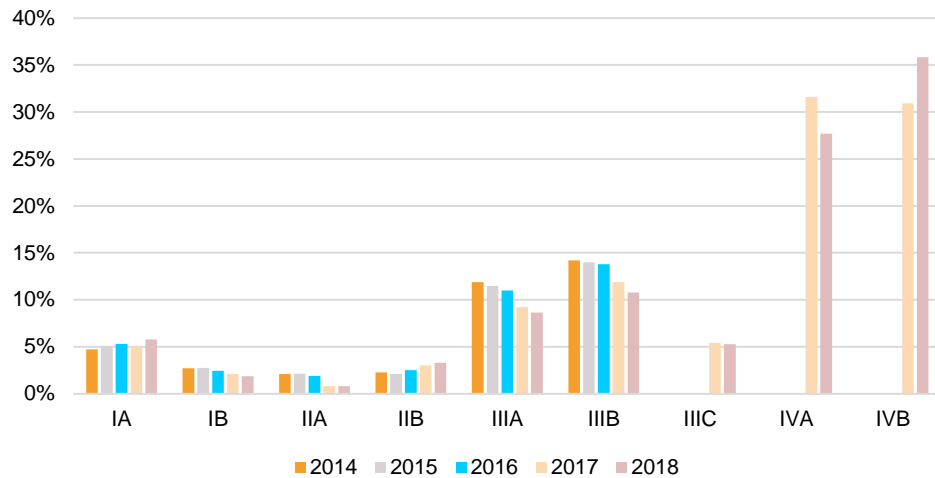
Stage distribution surgical and non-surgical primary cases 2014-2018

Legend: 2014 2015 2016 2017 2018
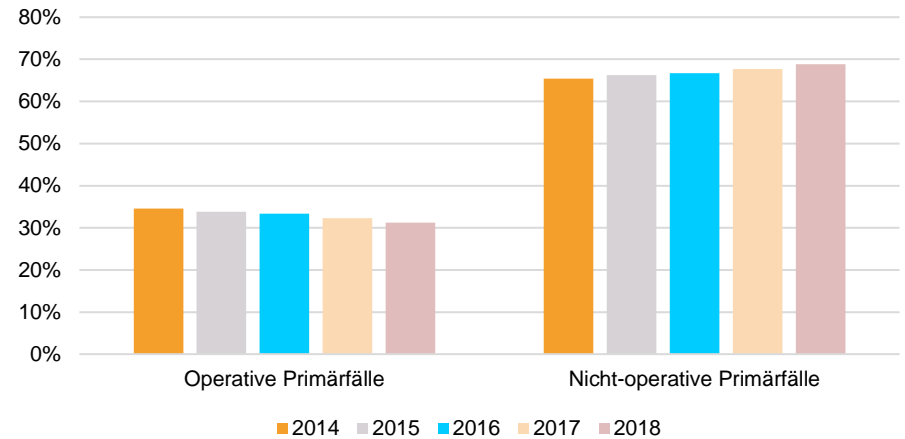
Since the update of the TNM classification (8th edition), stage IIIC and stage IV are also recorded separately for stage IVA and IVB.

9

1. Primary cases of the LCCC

Number

Median 338,00

Sollvorgabe ≥ 200

Sollvorgabe = target value
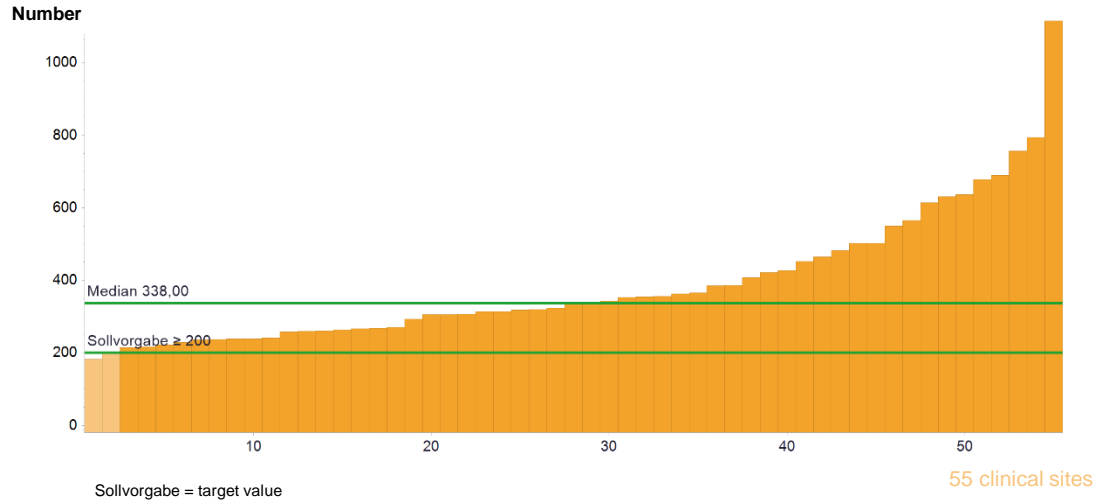
55 clinical sites

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Number	Total number of primary cases of the LCC (definition primary case: Catalogue of requirements 1.2.1)	338	183 – 1,115	21,364
	Target value ≥ 200			
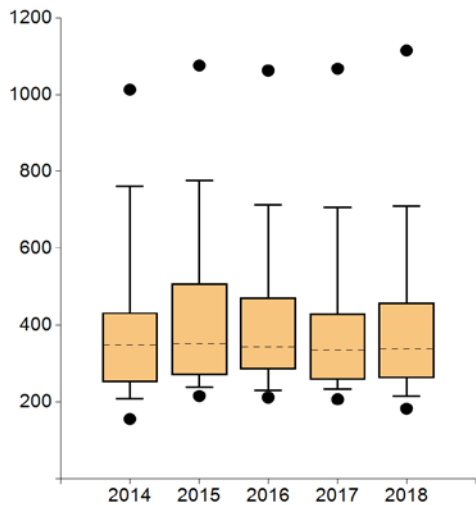
		2014	**2015**	**2016**	**2017**	**2018**
●	Max	1,013.00	1,076.00	1,063.00	1,068.00	1,115,00
	95th percentile	761.00	777.00	713.50	707.40	709.80
	75th percentile	433.00	508.50	472.25	429.50	458.00
	Median	348.00	351.00	344.00	335.50	338.00
	25th percentile	251.00	270.75	285.25	258.50	262.50
	5th percentile	209.00	239.15	231.00	233.80	215.40
●	Min	156.00	216.00	212.00	207.00	183.00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100,00%	53	96.36%

Comments:
The median and the 25th and 95th percentiles of the primary case numbers have increased compared to indicator year 2017. Nevertheless, a slight downward trend in the primary case number has been observed in recent years. 2 Centres failed to meet the target value of at least 200 primary cases in the surveillance audits in indicator year 2018 (previous year: 100% compliance). In one case the target value was missed only very narrowly and for the first time. In another case, it was agreed in the audit to optimise referral management and information policy. A comparison of the primary cases in the German certified cancer Centres (20,784 of 21,364) with the total incidence (Germany: 57,459, www.krebsdaten.de, data as of 31.07.2019) shows that 36.2% of patients newly diagnosed with a malignant tumour of the lung were treated in a certified Centre (previous year: 35.8%).

2a. Pretherapeutic tumour conference
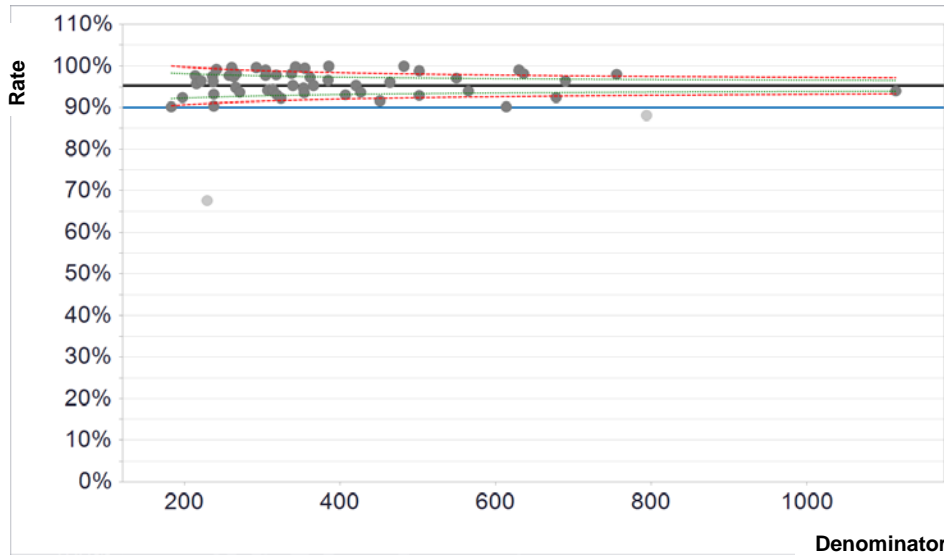
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases presented in the pretherapeutic conference	324*	155 – 1,048	20,342
Denominator	Primary cases of the LCC (= indicator 1)	338*	183 – 1,115	21,364
Rate	Target value ≥ 90%	96.12%	67.69% - 100%	95.22%**
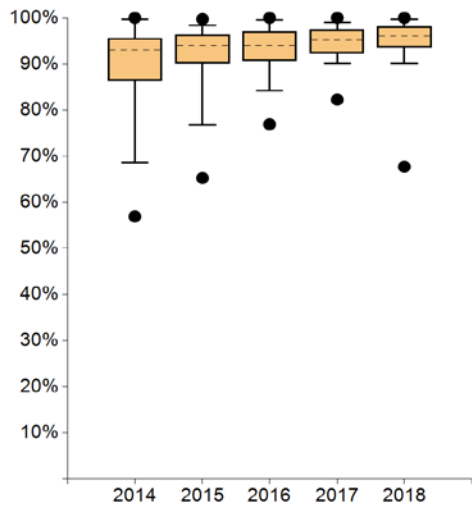
		2014	2015	2016	2017	2018
●	Max	100%	99.72%	100%	100%	100%
	95th percentile	99.68%	98.39%	99.48%	98.96%	99.68%
	75th percentile	95.61%	96.39%	97.04%	97.40%	98.05%
	Median	93.08%	94.03%	93.94%	95.14%	96.12%
	25th percentile	86.27%	90.15%	90.69%	92.22%	93.59%
	5th percentile	68.58%	76.73%	84.15%	90.11%	90.21%
●	Min	56.90%	65.25%	76.90%	82.25%	67.69%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	53	96.36%

Comments:
The presentation rate in the pre-therapeutic tumour board could be further slightly increased at a high level. As in indicator year 2017, 2 Centres did not meet the target value of at least 90%. One of them already missed it in indicator year 2017, but can show a rising trend with only a slight shortfall. In both Centres, measures have been agreed or implemented (e.g. revised SOP) to ensure the routine presentation of newly admitted patients in the pre-therapeutic tumour board.

* 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.

2b. Presentation of new recurrence and/or distant metastases the tumour conference
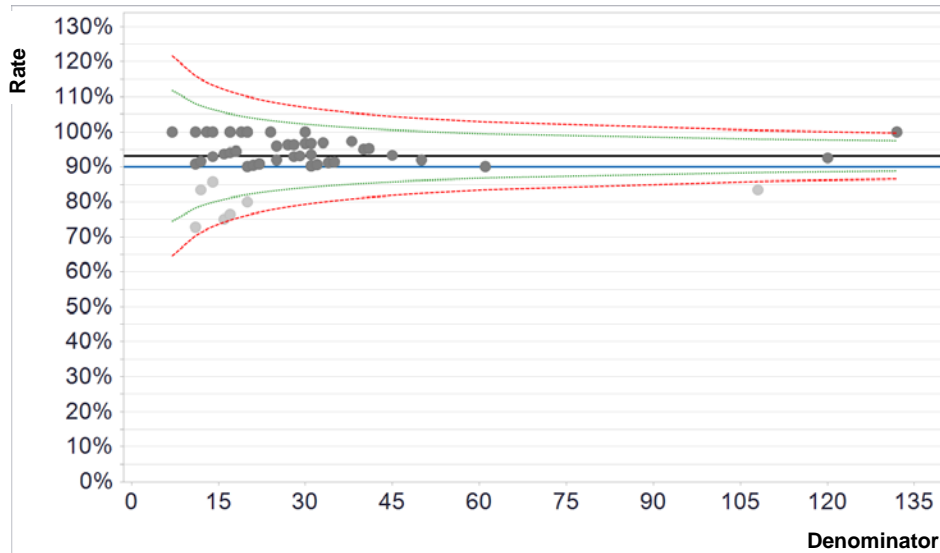
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Patients with recent recurrence and/or distant metastases after previous curative treatment (R0 resection) presented in tumour board	20*	7 - 132	1,497
Denominator	Patients with new recurrence and/or distant metastases after previous curative treatment (R0 resection)	22*	7 - 132	1,607
Rate	Target value ≥ 90%	93.75%	72.73% - 100%	93.5%**
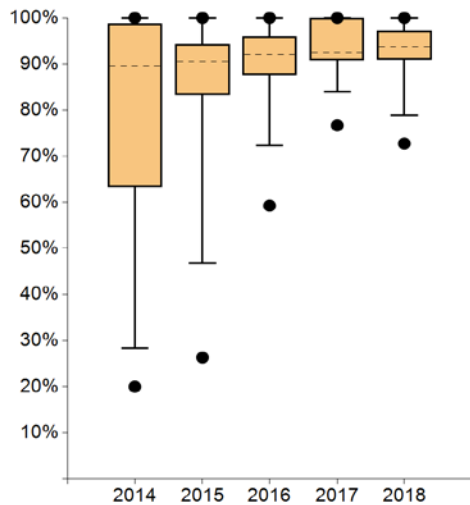
		2014	2015	2016	2017	2018
●	Max	100%	100%	100%	100%	100%
	95th percentile	100%	100%	100%	100%	100%
	75th percentile	98.71%	94.20%	95.91%	100%	97.17%
	Median	89.45%	90.59%	91.95%	92.45%	93.75%
	25th percentile	63.24%	83.33%	87.69%	90.78%	90.91%
	5th percentile	28.35%	46.72%	72.32%	83.96%	78.94%
●	Min	20.00%	26.32%	59.26%	76.67%	72.73%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	48	87.27%

Comments:
The proportion of Centres meeting the target value has risen again compared with the previous year (2017: 84%). 7 Centres do not meet the target value. Shortfalls were explained by the Centres with, among other things, transfers for further therapy before presentation in the tumour board, but also with failure to present in the tumour board. As a consequence, measures (in particular sensitisation/training of employees, SOP) for consistent presentation at the tumour board were agreed upon during the audits following individual case analyses.

* 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. Tumour conference after surgical treatment of primary cases stages IB-IIIB

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with stages IB-IIIB after surgical therapy that were presented at the tumour conference	62*	26 - 240	4,091
Denominator	Primary cases with stages IB-IIIB after surgical therapy with anatomic lung resection	64*	27 - 248	4,201
Rate	Target value ≥ 90%	98.73%	91.20% - 100%	97.38%**
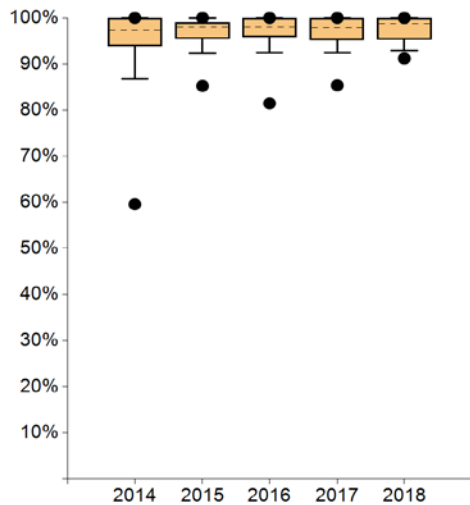
		2014	2015	2016	2017	2018
●	Max	100%	100%	100%	100%	100%
	95th percentile	100%	100%	100%	100%	100%
	75th percentile	100%	99.04%	100%	100%	100%
	Median	97.30%	97.99%	97.96%	97.88%	98.73%
	25th percentile	93.86%	95.39%	95.86%	95.24%	95.28%
	5th percentile	86.75%	92.27%	92.39%	92.34%	92.96%
●	Min	59.57%	85.23%	81.45%	85.36%	91.20%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	55	100.00%

Comments:
As in previous years, this indicator is excellently implemented by the Centres. While in indicator year 2017 one Centre still missed the target, in 2018 all Centres achieved the quota of at least 90% of patients presented at the tumour board after surgical therapy in stages IB-IIIB. Developments in recent years show that the number of Centres that originally deviated from the target value, which was quite significant, has been gradually reduced to zero.

* 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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4. Psycho-oncological care
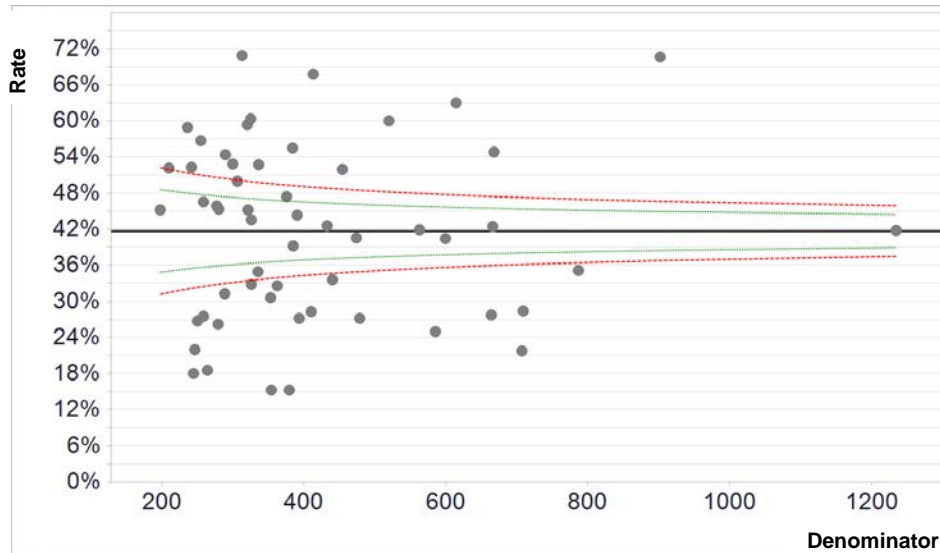
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Patients who received psycho-oncological care in an inpatient or outpatient setting (duration of consultation ≥ 25 min)	148*	44 - 637	9,579
Denominator	Primary cases of the LCC (= indicator 1) + patients with a new recurrence and/or remote metastasis after previous curative treatment	354*	197 – 1,235	22,971
Rate	Explanation mandatory*** <10% and >60%	42.49%	15.25% - 70.83%	41.70%**

		2014	**2015**	**2016**	**2017**	**2018**
●	Max	89.64%	81.54%	77.60%	76.22%	70.83%
	95th percentile	71.22%	67.41%	70.21%	68.21%	64.46%
	75th percentile	52.22%	52.91%	47.76%	50.21%	52.48%
	Median	41.24%	37.41%	37.37%	38.45%	42.49%
	25th percentile	22.41%	24.47%	25.12%	29.55%	28.32%
	5th percentile	12.00%	14.90%	13.65%	20.42%	18.40%
●	Min	8.40%	12.35%	12.42%	16.50%	15.25%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	50	90.91%

Comments:
The median of the psycho-oncological presentation rate continued to rise slightly compared to the previous year. Overall, the trend of recent years towards a lower dispersion of the indicator continued. All Centres outside of the plausibility limits had presentation rates of over 60% in indicator year 2018 and thus only had to explain a particularly high rate of psycho-oncological care. In these Centres, psycho-oncological care was often provided at a very low threshold, with high personnel expenses and in close coordination with the other specialties.
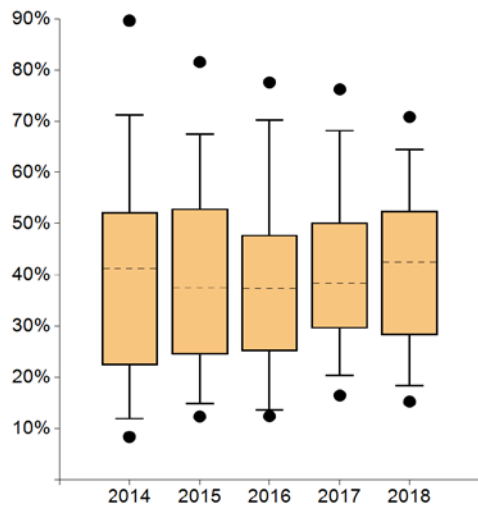
* The median for numerator and denominator does not refer to an existing center, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.
** Percentage of total patients treated in centers according to the numerator.
*** For values outside the plausibility limit(s), the centers are required to provide a justification.

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5. Counselling social services
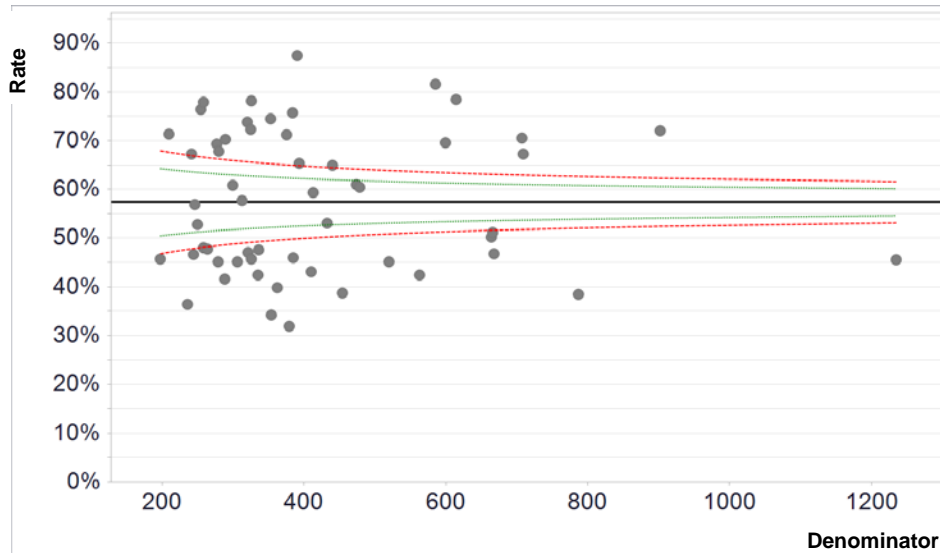
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Patients who received counselling by the social services in an inpatient or outpatient setting	201*	86 - 650	13,178
Denominator	Primary cases of the LCC (= indicator 1) + patients with a new recurrence and/or remote metastasis after previous curative treatment	354*	197 – 1,235	22,971
Rate	Explanation mandatory*** <40% and >90%	56.91%	31.93% - 87.44%	57.37%**

		2014	2015	2016	2017	2018
●	Max	100%	89.23%	92.00%	85.60%	87.44%
	95th percentile	82.24%	80.41%	79.15%	79.40%	78.30%
	75th percentile	62.61%	68.99%	67.73%	66.07%	70.41%
	Median	49.75%	59.93%	55.51%	53.65%	56.91%
	25th percentile	43.97%	49.48%	47.47%	47.17%	45.60%
	5th percentile	38.90%	39.60%	37.17%	39.58%	37.88%
●	Min	34.61%	24.21%	25.71%	34.96%	31.93%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
50	100.00%	47	94.00%

Comments:
In 6 Centres (previous year: 3), the rate of 40% of patients receiving counselling by the social services was not reached. 3 of these Centres only just missed the lower threshold. In the remaining 3 Centres, efforts to increase the counselling rate were agreed, such as informing staff about the importance of the social services and increasing staff numbers.

* 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.
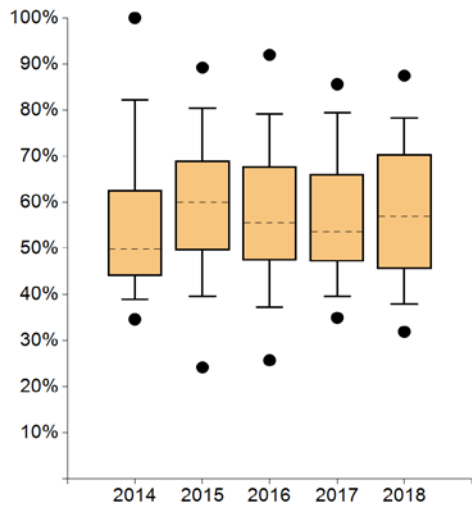** Percentage of total patients treated in centers according to the numerator.
*** For values outside the plausibility limit(s), the centers are required to provide a justification.

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6. Study participation
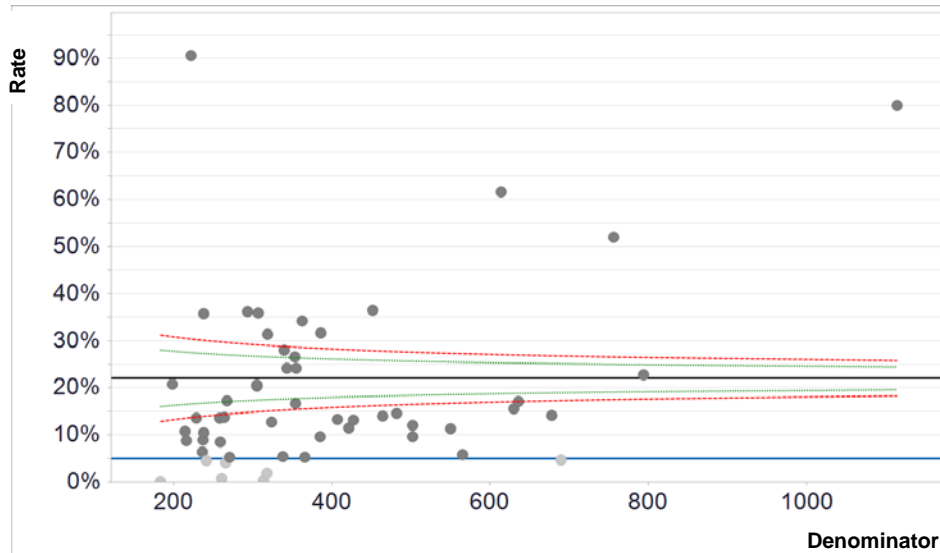
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Patients included in a study	54*	0 - 892	4,704
Denominator	Primary cases of the LCC (= indicator 1)	338*	183 – 1,115	21,364
Rate	Target value ≥ 5%	13.57%	0.00% - 90.54%	22.02%**
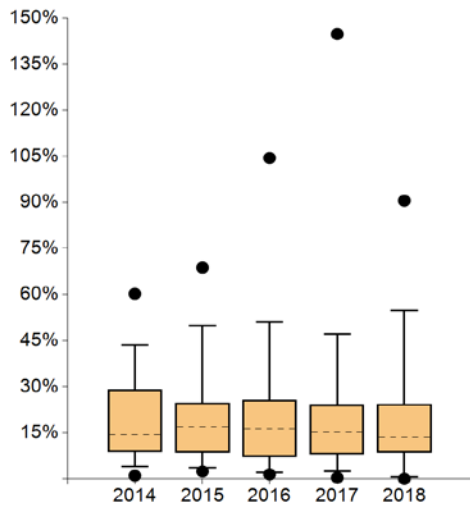
		2014	2015	2016	2017	2018
●	Max	60.22%	68.73%	104.42%	144.71%	90.54%
	95th percentile	43.50%	49.93%	51.09%	47.10%	54.85%
	75th percentile	29.06%	24.69%	25.72%	24.05%	24.22%
	Median	14.40%	16.97%	16.44%	15.08%	13.57%
	25th percentile	8.80%	8.69%	7.12%	8.06%	8.65%
	5th percentile	4.09%	3.63%	2.10%	2.48%	0.64%
●	Min	1.06%	2.43%	1.47%	0.40%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	47	85.45%

Comments:
The median of this indicator continues to decline. The further decreasing rates of study participation of the Centres in the 5th percentile are striking. 8 Centres (previous year: 3) do not reach the target value, 3 of which have rates below 1%. The Centres mainly cited personnel changes and the unanticipated early termination of studies already initiated as the reasons for failing to meet the target value. To remedy the deviations, it was agreed, among other things, to systematically address patients through personnel and organisational measures. In some cases, it was agreed to participate in registry studies in which patients can be continuously enrolled.

* 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. Flexible bronchoscopy

Number

Median 2482,00

Sollvorgabe ≥ 500

Sollvorgabe = target value
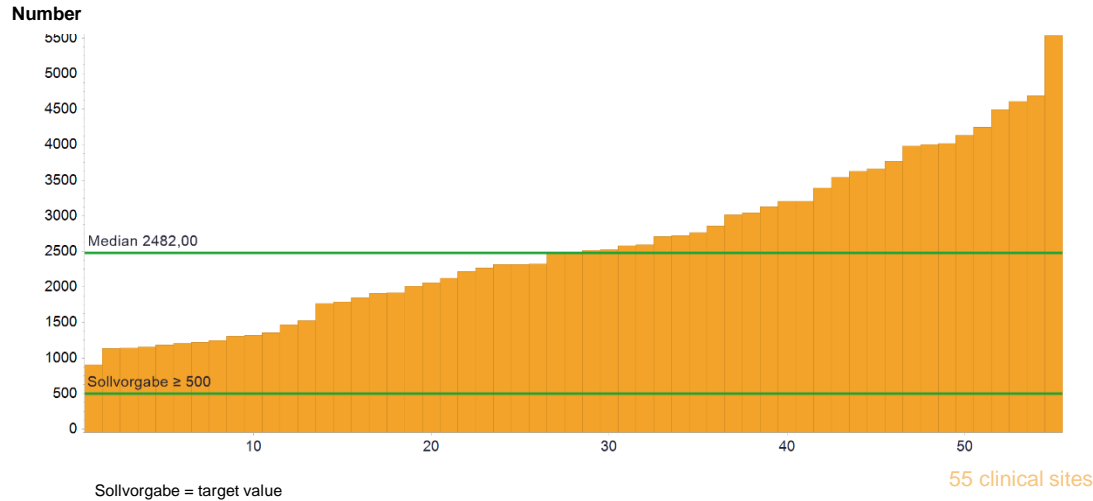
55 clinical sites

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Number	Flexible bronchoscopies for each service provider	2,482	904 – 5,535	142,491
	Target value ≥ 500			
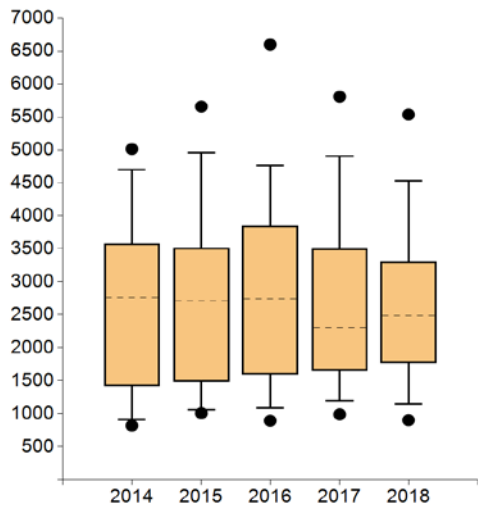
		2014	**2015**	**2016**	**2017**	**2018**
●	Max	5,014.00	5,657.00	6,597.00	5,807.00	5,535,00
	95th percentile	4,701.00	4,953.85	4,761.00	4,009.95	4,530,60
	75th percentile	3,581.00	3,515.00	3,846.50	3,507.25	3,300,00
	Median	2,764.00	2,705.50	2,742.00	2,301.00	2,482,00
	25th percentile	1,421.00	1,482.50	1,592.50	1,625.50	1,775,50
	5th percentile	912.00	1,060.75	1,083.00	1,199.75	1,148,00
●	Min	822.00	1,009.00	896.00	991.00	904,00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	55	100.00%

Comments:
As in previous years, all certified Centres very clearly meet the target value of at least 500 flexible bronchoscopies.

8. Interventional bronchoscopy (thermal procedures and stenting)

Sollvorgabe = target value

55 clinical sites

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Number	Interventional bronchoscopic procedures for tumour closure or stenosis (thermal procedures and stent placement) per service provider (OPS: 5-319.14, 5-319.15, 5-320.0)	58	12 - 462	4,841
	Target value ≥ 10			
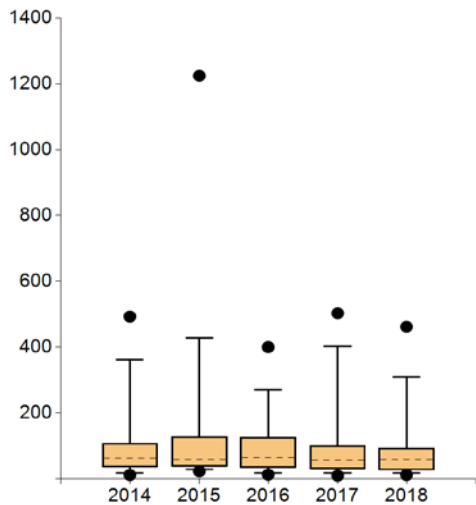
		2014	2015	2016	2017	2018
●	Max	493.00	1224.00	400.00	503.00	462.00
	95th percentile	361.00	427.80	270.75	403.30	309.90
	75th percentile	109.00	129.00	125.75	101.50	93.00
	Median	61.00	57.50	63.50	56.50	58.00
	25th percentile	36.00	38.50	33.50	30.75	27.00
	5th percentile	17.00	29.05	17.00	18.00	17.70
●	Min	12.00	23.00	13.00	10.00	12.00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	55	100.00%

Comments:
While in indicator year 2017 one Centre still missed the target value, it was reached by all Centres in 2018. Overall, a slightly declining number (previous year: 5,043) of interventional bronchoscopic procedures can be seen in comparison with previous years.

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9a. Lung resections – surgical primary cases

Number

Median 99,00
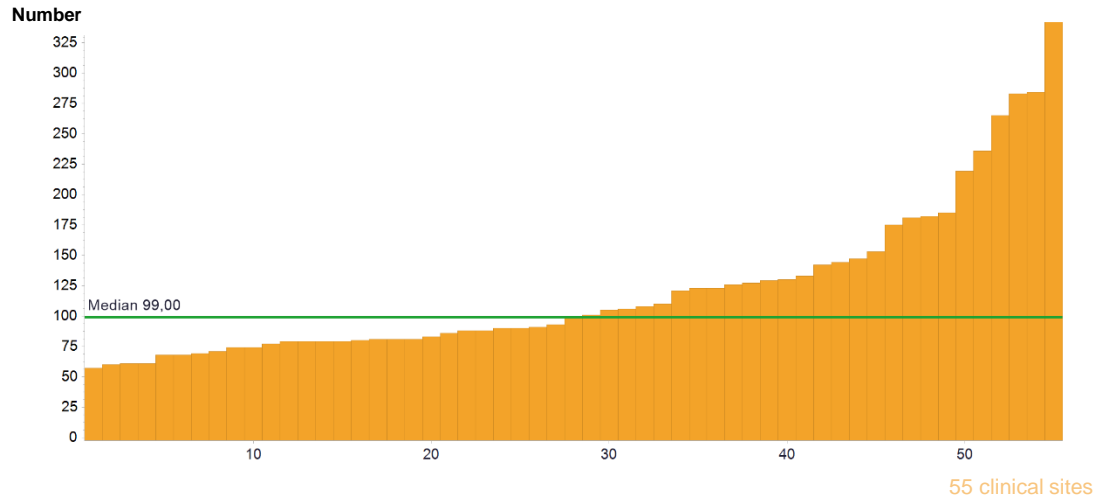
55 clinical sites

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Number	Primary surgical cases anatomical lung resections (OPS: 5-323 to 5-328, 6-digit, exclusively with ICD-10 C34)	99	57 - 345	6,670
	No target value defined			

		2014	2015	2016	2017	2018
●	Max	416.00	384.00	352.00	331.00	345.00
	95th percentile	288.00	282.15	261.75	264.05	270.40
	75th percentile	146.00	166.75	151.25	131.50	137.50
	Median	111.00	115.00	120.00	106.00	99.00
	25th percentile	85.00	94.00	87.25	83.25	79.00
	5th percentile	68.00	76.05	76.25	73.90	61.00
●	Min	48.00	68.00	59.00	43.00	57.00

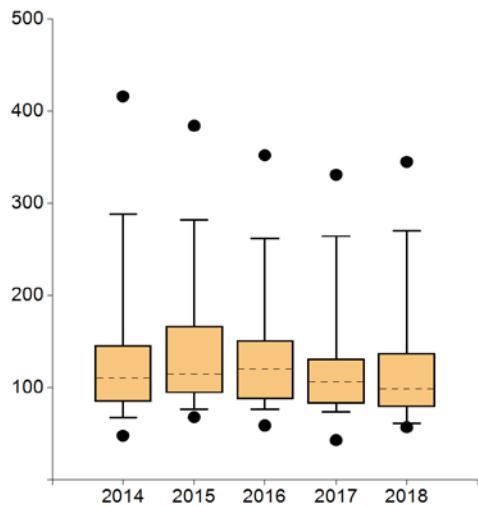| Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	-----	-----

Comments:
The number of primary cases operated on in Certified Lung Cancer Centres increased by 6.7% compared to the previous year. The number of Certified Lung Cancer Centres increased by 10% over the same period. At the same time, the median falls below 100 operated primary cases. 6 of the 15 Centres within the 25th percentile (i.e. a maximum of 79 operated primary cases) were certified for the first time in 2017 and 2018 respectively.

9b. Lung resections – surgical expertise

Median 118,00

Sollvorgabe ≥ 75

Sollvorgabe = target value
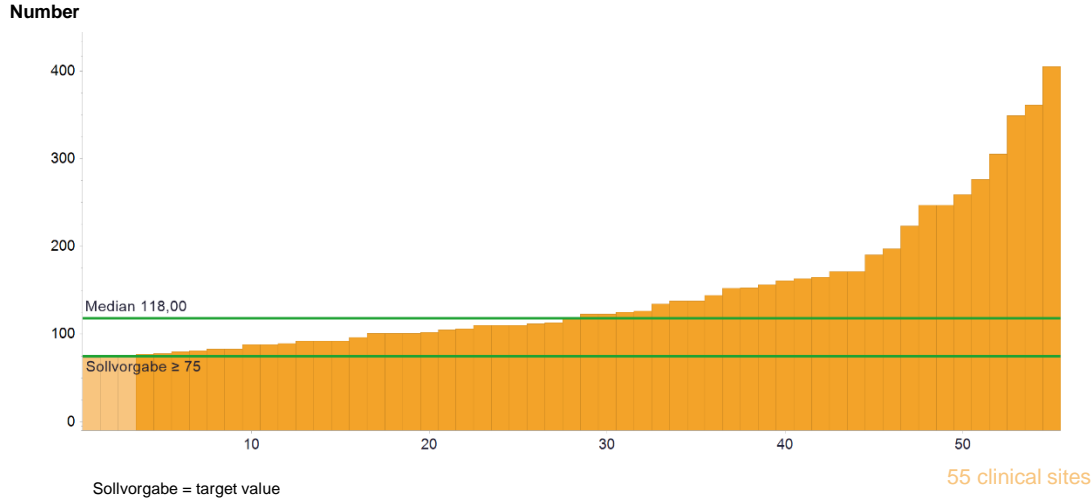
55 clinical sites

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Number	Operative expertise - number of anatomical resections (OPS: 5-323 to 5-328, for each ICD-10 C diagnosis, incl. ICD-10 C34)	118	73 - 405	8,031
	Target value ≥ 75			
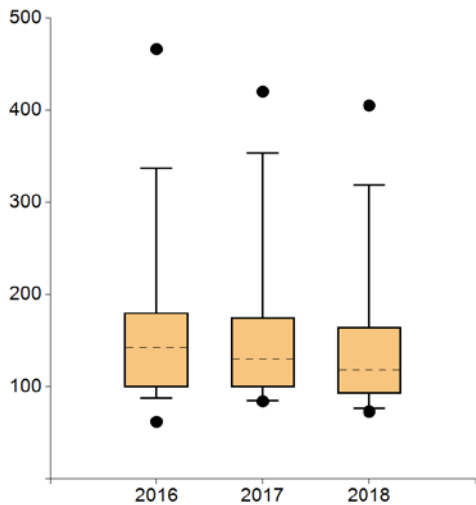
		2014	2015	2016	2017	2018
●	Max	-----	-----	466.00	420.00	405.00
	95th percentile	-----	-----	337.00	353.80	318.20
	75th percentile	-----	-----	180.00	174.75	164.00
	Median	-----	-----	142.50	130.00	118.00
	25th percentile	-----	-----	99.25	99.25	92.00
	5th percentile	-----	-----	87.25	85.00	76.10
●	Min	-----	-----	62.00	84.00	73.00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	52	94.55%

Comments:
After a 100% implementation in indicator year 2017, 3 Centres fell slightly short of the target value of at least 75 anatomical lung resections for all malignant lung tumours in 2018. These Centres were in the surveillance audit (the proof of case numbers for re-certification in the re-audit - every 3 years - is required). The German certified Centres performed a total of 7,697 interventions, which corresponds to 56.6% (previous year: 49.9%) of the anatomical lung resections performed in Germany (N=13,592, according to hospital statistics of the Federal Statistical Office).

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10. Ratio of broncho-/ angioplasty operations to pneumonectomies
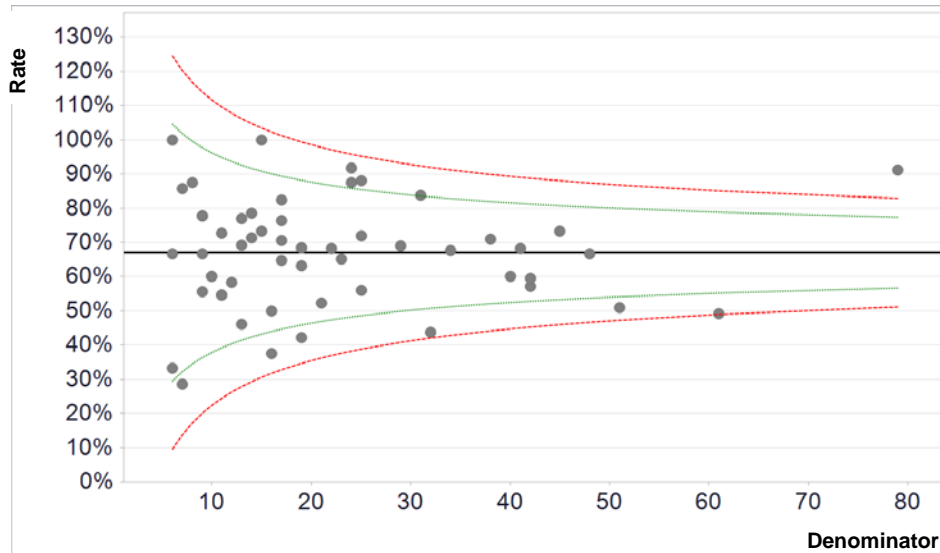
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with bronchoplasty / angioplasty procedures	12*	2 - 72	815
Denominator	Primary cases with pneumonectomy and primary cases with broncho-/angioplasty	17*	6 - 79	1,216
Rate	Explanation mandatory*** <50	68,18%	28,57% - 100%	67.02%**
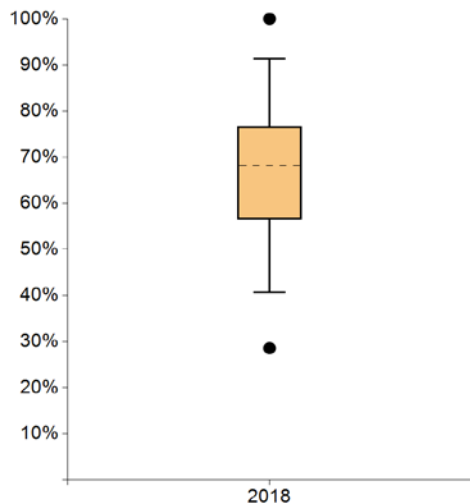
		2014	2015	2016	2017	2018
●	Max	-----	-----	-----	-----	100%
	95. Perzentil	-----	-----	-----	-----	91.30%
	75. Perzentil	-----	-----	-----	-----	76.70%
	Median	-----	-----	-----	-----	68.18%
	25. Perzentil	-----	-----	-----	-----	56.57%
	5. Perzentil	-----	-----	-----	-----	40.73%
●	Min	-----	-----	-----	-----	28.57%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	48	87.27%

Comments:
From indicator year 2018 onwards, this indicator summarises the former indicators of the proportion of pneumonectomies and bronchoplastic/angioplastic operations as a proportion of lung resections. 7 Centres had to give a reason why their quota was shifted in favour of pneumonectomies. A good half of these Centres were able to give plausible reasons to the auditors in the context of an individual case analysis, e.g. pneumonectomy when the tumour melted in or the impossibility of systemic therapy due to an inflammatory situation.

* 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.

11. Videothoracoscopic (VATS) and robot-assisted (RATS) anatomical resections
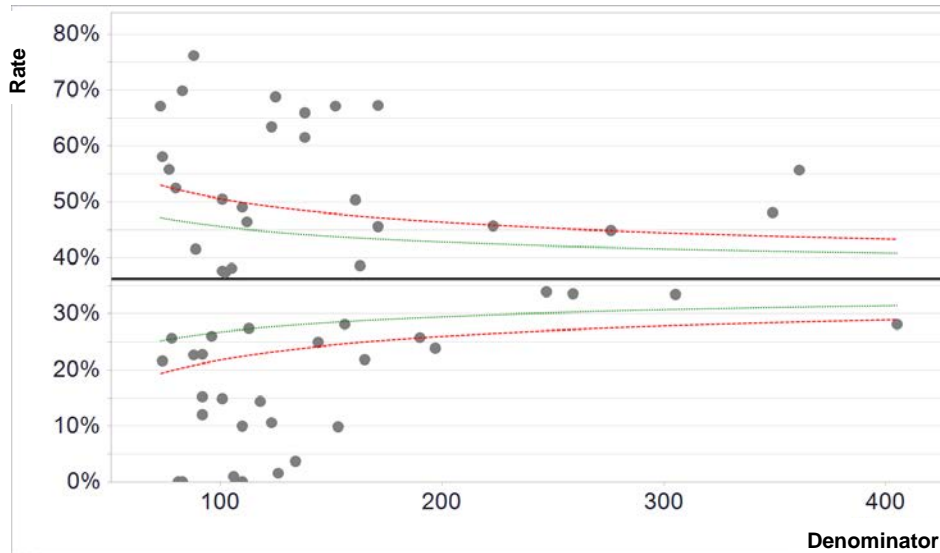
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Video thoracoscopic (VATS) and robot-assisted (RATS) performed anatomical resections	43*	0 - 201	2,906
Denominator	Operative expertise - number of anatomical resections(OPS: 5-323 to 5-328 for each ICD-10 C diagnosis, incl. ICD-10 C34)	118*	73 - 405	8,031
Rate	No target value	34.01%	0,00% - 76.4%	36.18%**

		2014	2015	2016	2017	2018
●	Max	-----	-----	-----	-----	76.14%
	95. Perzentil	-----	-----	-----	-----	67.72%
	75. Perzentil	-----	-----	-----	-----	50.41%
	Median	-----	-----	-----	-----	34.01%
	25. Perzentil	-----	-----	-----	-----	21.72%
	5. Perzentil	-----	-----	-----	-----	0.66%
●	Min	-----	-----	-----	-----	0.00%

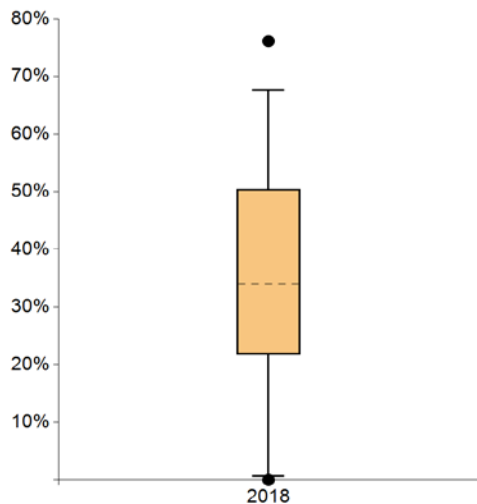| Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	----	----

Comments:
This indicator was collected for the first time in 2018. There is a large dispersion in the proportion of video thoracoscopic and robot-assisted anatomical lung resections. On the median, VATs/RATS procedures are performed in one third of anatomical lung resections. 3 Centres did not perform any procedures at all in the indicator year. Both Centres with very low (<20%) and very high rates (>60%) of using the procedures performed fewer anatomical resections on average (mean value: 115) than the Centres as a whole (mean value: 146).

* 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.

12. 30d Lethality after resections
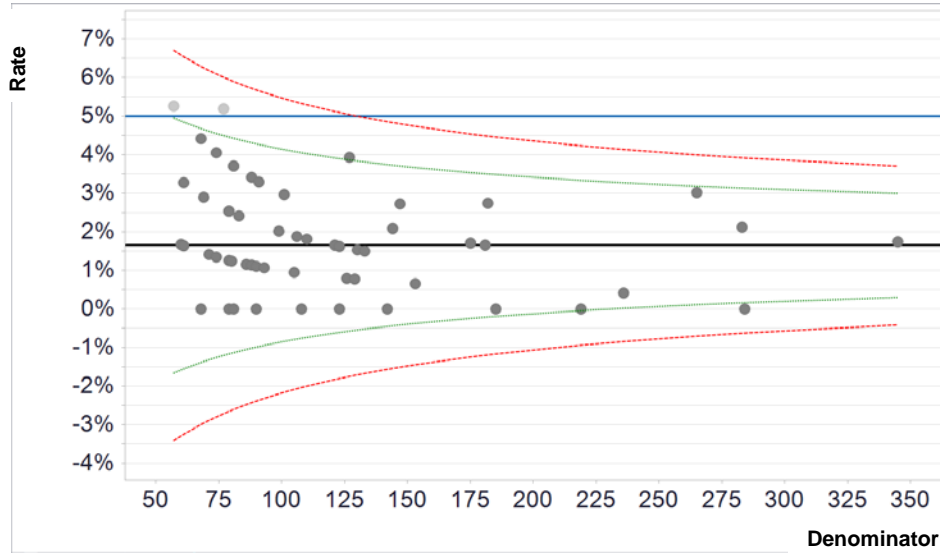
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Post-operative deceased patients after resection within 30d	2*	0 - 8	110
Denominator	Primary cases with lung resection per department (= indicator 9a)	99*	57 - 345	6,670
Rate	Target value ≤ 5%	1.65%	0.00% - 5.26%	1.65%**

		2014	2015	2016	2017	2018
●	Max	6.94%	5.00%	4.49%	6.67%	5.26%
	95th percentile	5.00%	4.53%	4.12%	4.13%	4.16%
	75th percentile	2.94%	2.77%	2.50%	3.23%	2.74%
	Median	1.69%	2.02%	1.65%	1.64%	1.65%
	25th percentile	0.83%	1.18%	1.01%	0.89%	0.87%
	5th percentile	0.00%	0.00%	0.11%	0.00%	0.00%
●	Min	2014	2015	2016	0.00%	0.00%

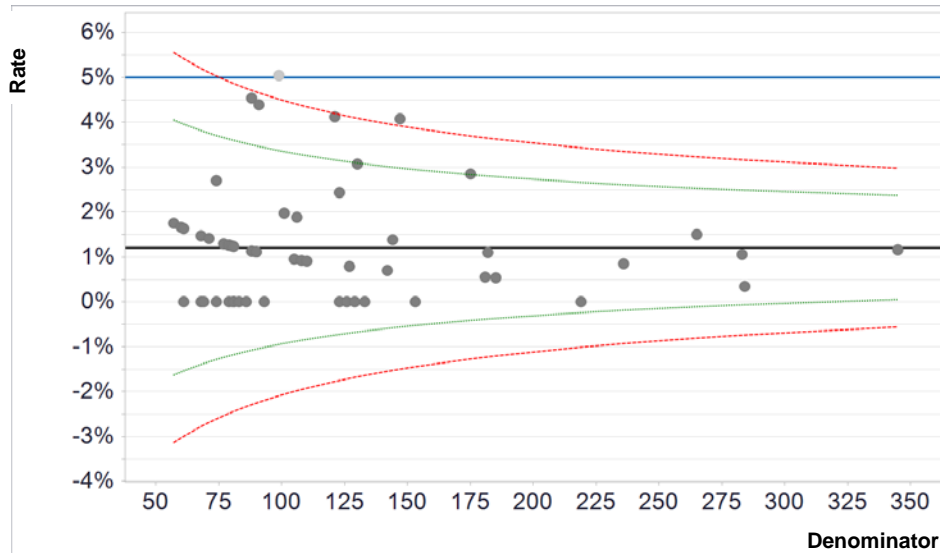| Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
50	100.00%	53	93-36%

Comments:
The target value of a maximum of 5% of patients who die within 30 days of surgery continued to be met very well. 2 Centres slightly exceed this rate. 1 Centre could explain the increased rate by the fact that the deaths were not due to surgery (e.g. suicide). The remaining Centre was asked, after detailed case analysis, to take measures to avoid postoperative complications in the future.

* 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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13. Post-operative bronchial stump/anastomosis insufficiency

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Post-operative bronchial stump/anastomosis insufficiency	1*	0 - 6	81
Denominator	Primary cases with lung resection per department (= indicator 9a)	99*	57 - 345	6,670
Rate	Target value ≤ 5%	1.11%	0.00% - 5.05%	1.21%**
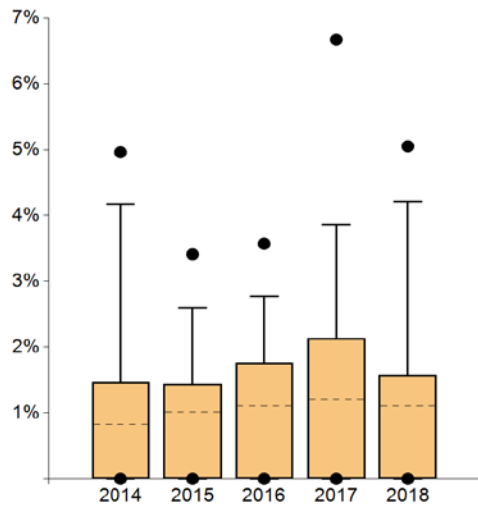
		2014	2015	2016	2017	2018
●	Max	4.96%	3.41%	3.57%	6.67%	5.05%
	95th percentile	4.17%	2.59%	2.77%	3.86%	4.21%
	75th percentile	1.47%	1.44%	1.77%	2.14%	1.58%
	Median	0.83%	1.01%	1.11%	1.21%	1.11%
	25th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
	5th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
●	Min	0.00%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	54	98.18%

Comments:
As in previous years, this target value is largely met. As in the previous year, only 1 Centre slightly exceeds the target value. However, in the specific case, the individual case analysis did not reveal any quality deficits.

* 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. Revision surgeries
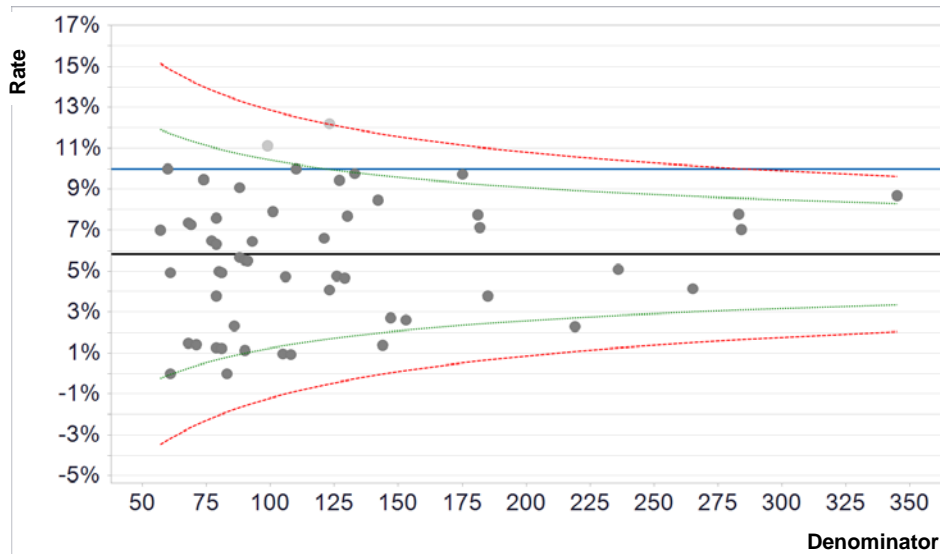
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Revision surgeries resulting from perioperative complications	5*	0 - 30	389
Denominator	Primary cases with lung resection per department (= indicator 9a)	99*	57 - 345	6,670
Rate	Target value ≤ 10%	5.56%	0.00% - 12.20%	5.83%**
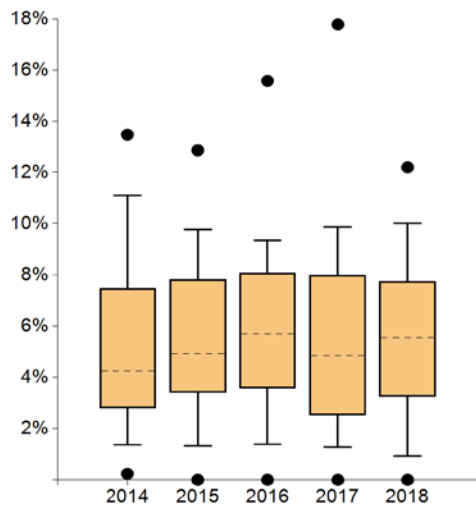
	2014	2015	2016	2017	2018
Max	13.48%	12.87%	15.58%	17.78%	12.20%
95th percentile	11.11%	9.78%	9.34%	9.88%	10.00%
75th percentile	7.46%	7.82%	8.09%	7.99%	7.75%
Median	4.24%	4.93%	5.70%	4.85%	5.56%
25th percentile	2.80%	3.43%	3.59%	2.54%	3.25%
5th percentile	1.37%	1.31%	1.40%	1.27%	0.94%
Min	0.24%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	53	96.36%

Comments:
Fulfillment of the target value remains at a high level. 2 Centres (previous year: 3) exceeded the specified rate of a maximum of 10% anatomical lung resections requiring revision surgery. Common causes for revision surgery were alveolopleural fistulas/ soft tissue emphysema and anastomosis insufficiencies.

* 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.

15. Local R0 resections in stages IA/B and IIA/B
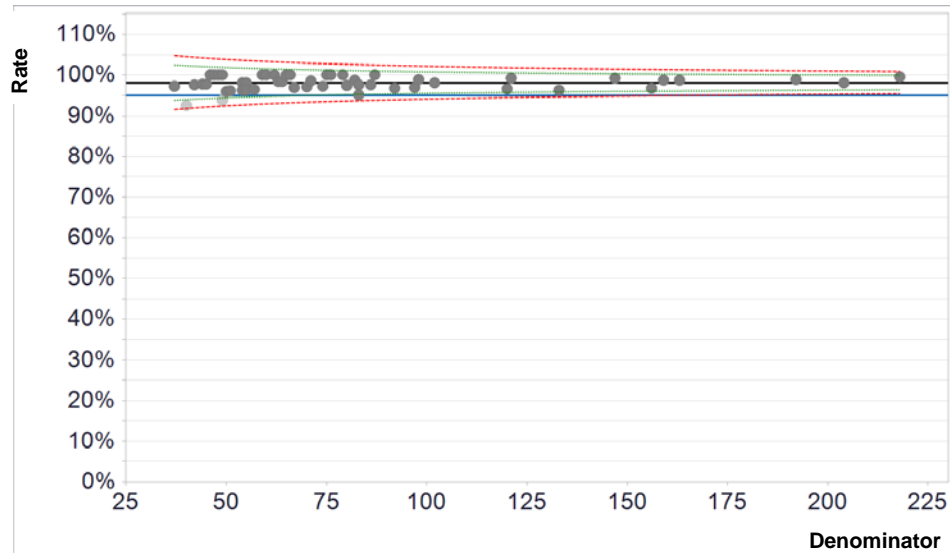
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with local R0 resections in stages IA/B and IIA/B after conclusion of surgical therapy	66*	36 - 217	4,424
Denominator	Operated primary cases with anatomical lung resection in stage IA/B and IIA/B	67*	37 - 218	4,507
Rate	Target value ≥ 95%	98.04%	92.50% - 100%	98.16%**
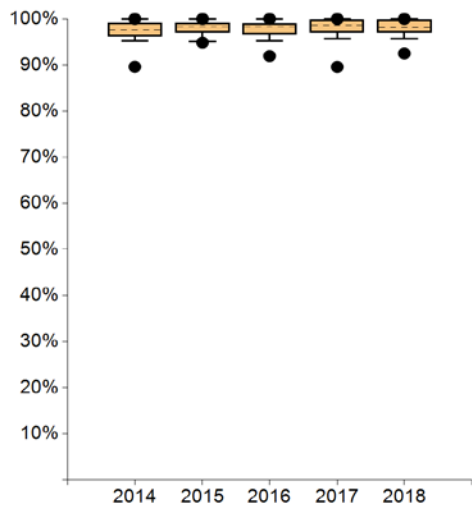
		2014	2015	2016	2017	2018
●	Max	100%	100%	100%	100%	100%
	95th percentile	100%	100%	100%	100%	100%
	75th percentile	99.12%	99.20%	99.01%	99.83%	99.77%
	Median	97.59%	98.29%	98.29%	98.60%	98.04%
	25th percentile	96.20%	97.06%	96.64%	96.98%	97.01%
	5th percentile	95.14%	95.04%	95.15%	95.77%	95.75%
●	Min	89.61%	94.85%	91.94%	89.58%	92.50%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	53	96.36%

Comments:
As in previous years, the Centres meet the requirements of this indicator very successfully. Only 2 Centres do not reach the target value of at least 95% local R0 resections in stage IA/B or IIA/B. The dominant reasons for non-compliance in these Centres were functional inoperability and Rx resections (due to divergent CT findings, among other things) with an unacceptable risk of a second-look resection. In the audits, an interdisciplinary discussion of Rx cases between thoracic surgery and pathology were recommended in particular.

* 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.

16. Local R0 resections in stages IIIA/B
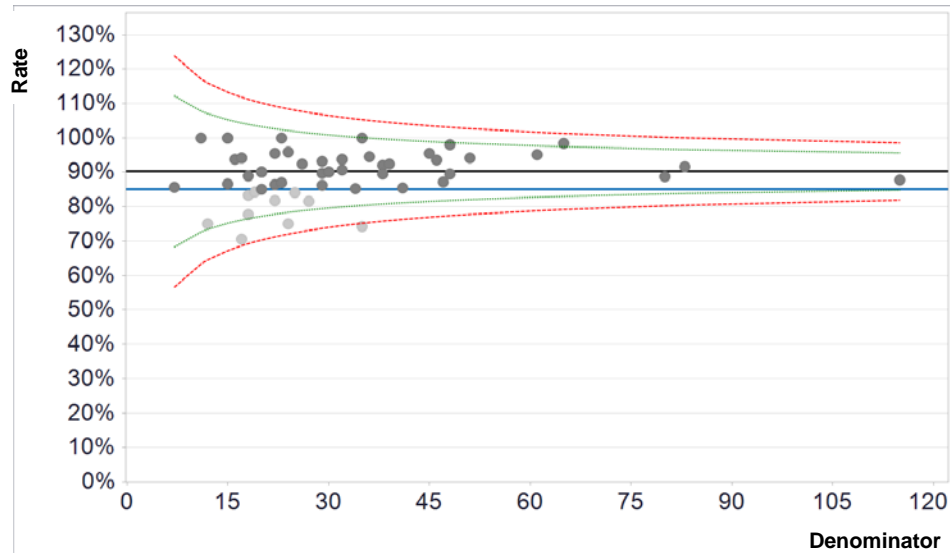
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with local R0 resections in stages IIIA/B after conclusion of surgical therapy	24*	6 - 101	1,589
Denominator	Operated primary cases with stage IIIA/B anatomical lung resection	27*	7 - 115	1,761
Rate	Target value ≥ 85%	90.00%	70.59% - 100%	90.23%**
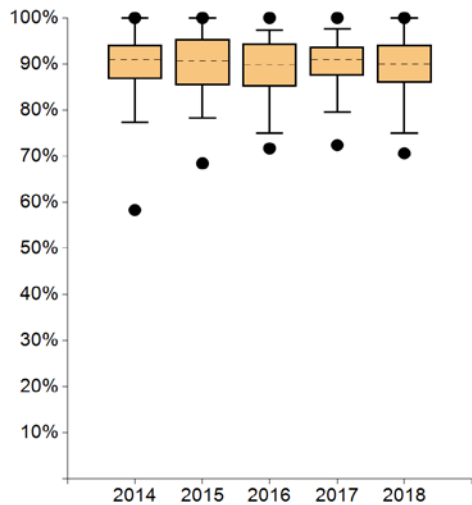
		2014	2015	2016	2017	2018
●	Max	100%	100%	100%	100%	100%
	95th percentile	100%	99.94%	97.29%	97.58%	100%
	75th percentile	94.12%	95.32%	94.40%	93.70%	94.12%
	Median	90.91%	90.70%	89.83%	90.91%	90.00%
	25th percentile	86.67%	85.37%	85.15%	87.50%	85.96%
	5th percentile	77.34%	78.26%	75.00%	79.53%	75.00%
●	Min	58.33%	68.42%	71.70%	72.41%	70.59%

| Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	45	81.82%

Comments:
The degree of implementation of this indicator remains very good overall. However, the results worsened in the 25th percentile: 10 Centres (previous year: 4) failed to meet the target value, in some cases significantly. In many cases, the Centres justified this by the fact that operations were performed with palliative intent or that the tumour only turned out to be non-R0 resectable intraoperatively. In addition, in many cases, a second-look resection of R1-resected patients was not feasible. In 4 of the 10 Centres, the audits did not identify any systematic causes for failing to meet the target value. In the remaining Centres, measures to increase the R0 rate in the future were agreed upon, such as action plans for preoperative evaluation and intra-year evaluations of the rate of R0 resections.

* 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. Thoracic radiotherapy
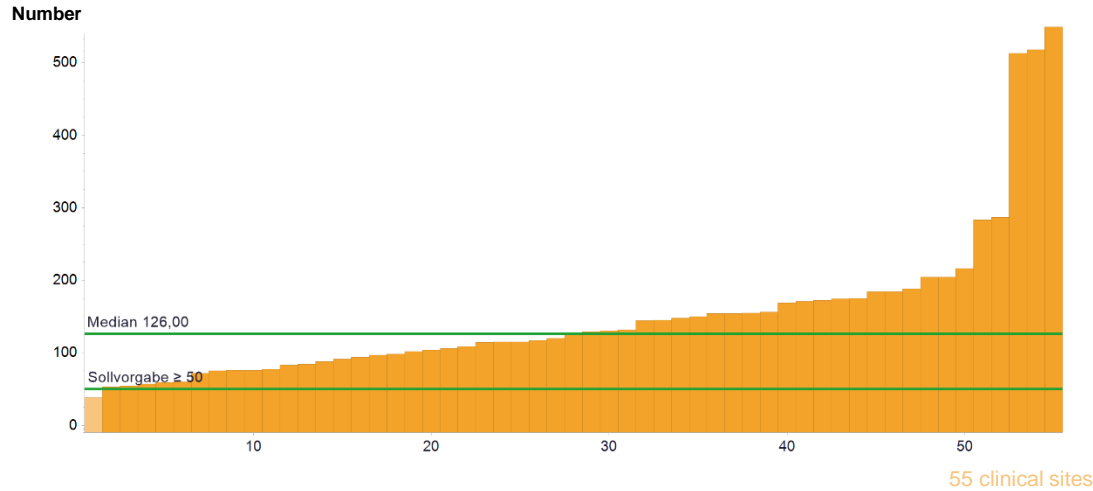
55 clinical sites

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Number	Thoracic radiotherapy (not just referring to primary cases)	126	38 - 549	8,248
	Target value ≥ 50			
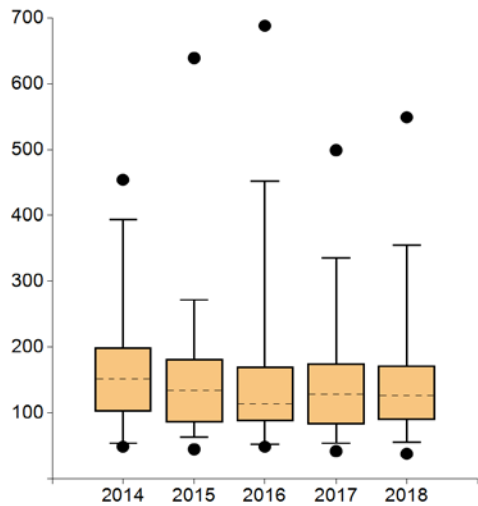
		2014	**2015**	**2016**	**2017**	**2018**
●	Max	454.00	639.00	688.00	499.00	549.00
	95th percentile	394.00	271.85	452.50	335.70	354.80
	75th percentile	199.00	181.75	170.00	175,.25	171.50
	Median	151.00	135.00	114.50	128.00	126.00
	25th percentile	102.00	85.25	87.50	83.00	89.50
	5th percentile	54.00	63.15	52.25	53.70	56.10
●	Min	49.00	45.00	49.00	42.00	38.00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	49	89.09%

Comments:

The vast majority of Centres easily reach the required minimum number of 50 thoracic radiations per year. 6 Centres (previous year: 8) fail to meet this target. 5 of these 6 Centres carry out the irradiations in a network structure, where a site-specific minimum requirement of 10 irradiation series applies and has been met. The underachieving Centre without network structure was also able to remedy the shortfall caused by a lack of equipment capacity.

18. Pathology reports

Number

Median 583,00

Sollvorgabe ≥ 200 maligne Lungenfälle (je Facharzt 100 L.)

Sollvorgabe = target value
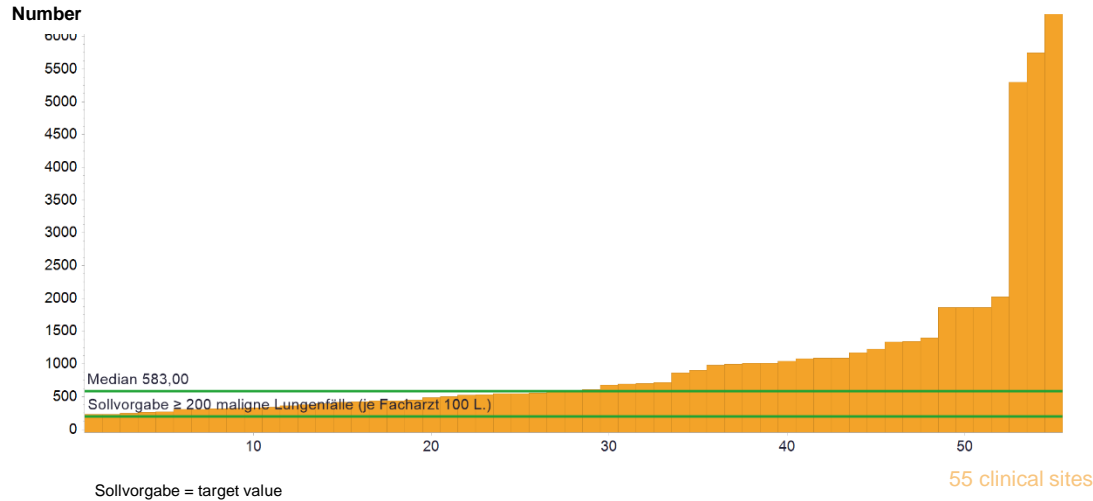
55 clinical sites

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Number	Assessed malignant lung cases	583	229 – 6,377	56,144
	Target value ≥ 200 malignant lung cases (100 L. per specialist)			
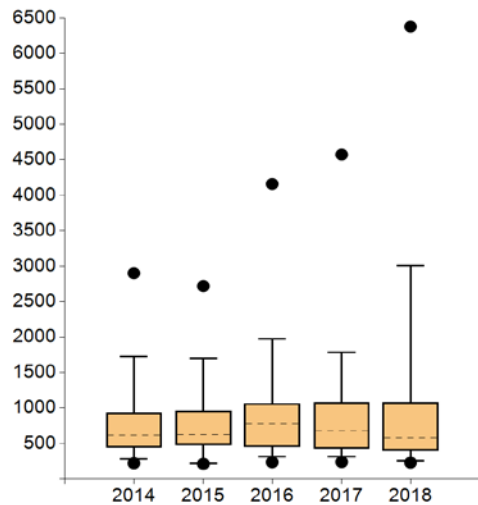
		2014	2015	2016	2017	2018
●	Max	2900.00	2718.00	4158.00	4572.00	6377.00
	95th percentile	1724.00	1698.60	1976.75	1781.10	3005.50
	75th percentile	936.00	958.00	1061.00	1074.50	1081.00
	Median	613.00	620.50	773.50	678.50	583.00
	25th percentile	445.00	475.50	447.00	423.25	400.00
	5th percentile	275.00	217.55	313.00	313.75	254.00
●	Min	221.00	211.00	235.00	238.00	229.00

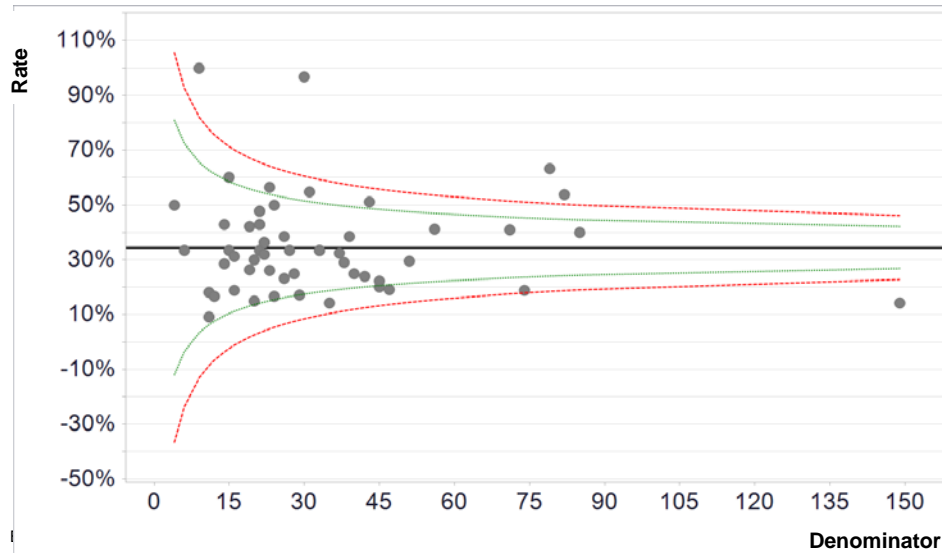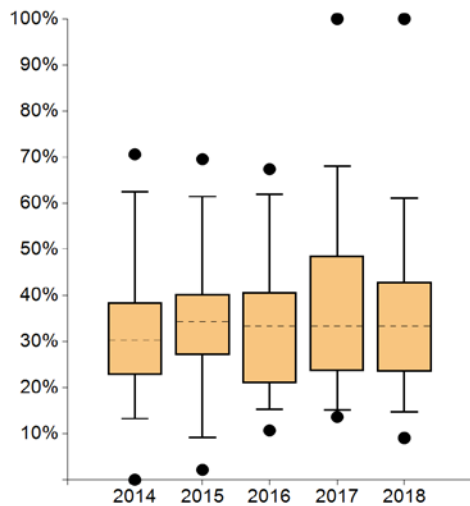| Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	55	100.00%

Comments:
The excellent level of full implementation of this indicator by all certified Centres was maintained in indicator year 2018.

19. Adjuvant cisplatin-containing chemotherapy stages II-IIIA1/2 (GL QI 6)

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Cisplatin-based chemotherapy to treat primary cases of R0 and lymph node resected NSCLCC stages II-IIIA1/2 with ECOG 0/1	9*	1 - 50	623
Denominator	R0- and LN-resected NSCLC primary cases with anastomic lung resection Stad. II-IIIA1/2 with ECOG 0/1	24*	4 - 149	1,807
Rate	Explanation mandatory*** <15% and >70%	33.33%	9.09% - 100%	34.48%**

		2014	**2015**	**2016**	**2017**	**2018**
●	Max	70.59%	69.57%	67.39%	100%	100%
	95. Perzentil	62.50%	61.39%	61.94%	67.99%	60.99%
	75. Perzentil	38.46%	40.32%	40.66%	48.67%	42.86%
	Median	30.23%	34.25%	33.33%	33.33%	33.33%
	25. Perzentil	22.82%	27.01%	20.96%	23.57%	23.45%
	5. Perzentil	13.25%	9.19%	15.26%	15.07%	14.79%
●	Min	0.00%	2.17%	10.71%	13.64%	9.09%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	50	90.91%

**Comments**:
The median of adjuvant cisplatin-containing chemotherapy in stage II-IIIA1/2 remained unchanged compared to the previous year. The continuing wide spread of the rates should also be seen in the light of the sometimes low patient numbers in the denominator. The 75th and 95th percentile have decreased. The Centres justified falling short of the corridor with advanced age, comorbidities, contraindications, rejection by patients or alternative administration of a carboplatin-containing chemotherapy. Exceedances were explained in the audit by low rates of patients with contraindications.

* 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.

20. Combined radio-chemotherapy in stages IIIA4/IIIB/IIIC (GL QI 7)
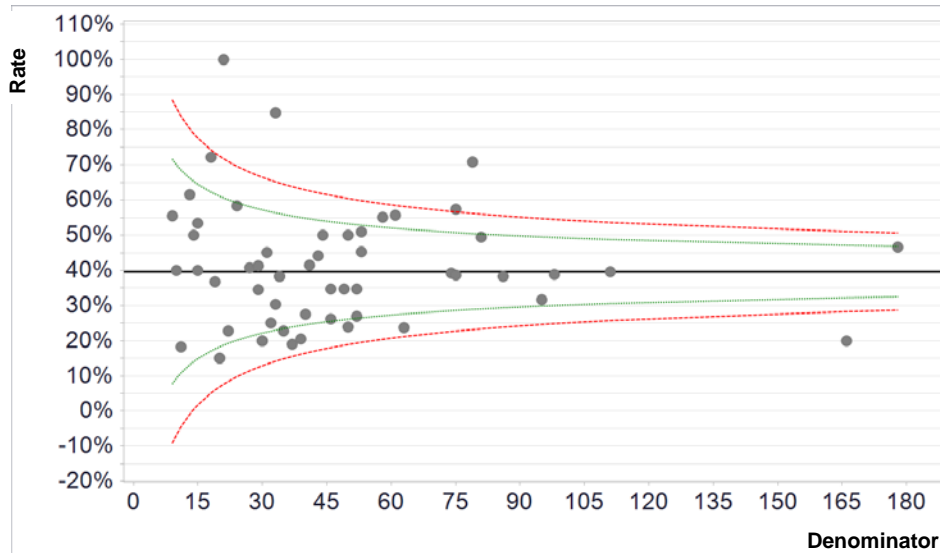
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Combined radio-chemotherapies for NSCLCC primary cases stages IIIA4/IIIB with ECOG 0/1	14*	2 - 83	1,033
Denominator	NSCLC primary cases Stad. IIIA4/IIIB/IIIC with ECOG 0/1	39*	9 - 178	2,603
Rate	Explanation mandatory*** <15% and >70%	38.78%	15.00% - 100%	39.68%**
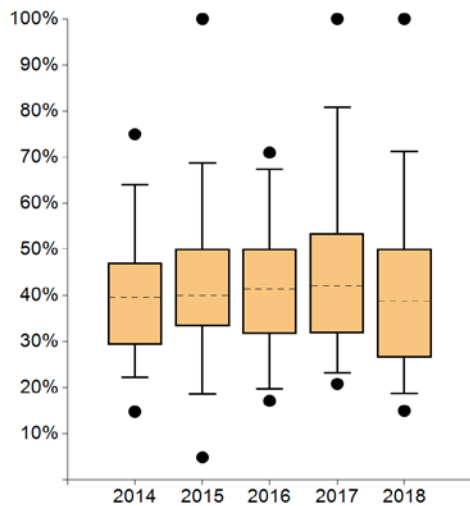
		2014	2015	2016	2017	2018
●	Max	75.00%	100%	70.97%	100%	100%
	95th percentile	64.00%	68.72%	67.40%	80,74%	71.29%
	75th percentile	47.06%	50.00%	50.00%	53,55%	50,00%
	Median	39.58%	40.00%	41.38%	42,08%	38,78%
	25th percentile	29.29%	33.33%	31.65%	31,77%	26,51%
	5th percentile	22.22%	18.55%	19.75%	23,22%	18,70%
●	Min	14.81%	4.88%	17.12%	20,83%	15,00%

| Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
55	100.00%	51	92.73%

Comments:
The median of this indicator has fallen slightly, but the dispersion remains high even in view of the fact that some of the populations in the denominator are small. No Centre falls below the rate of 15%. The Centres above the plausibility corridor of 70% were able to clearly demonstrate the high rate of combined radiochemotherapy in this patient group with the specific features of the cases they treated (especially: no contraindications).

* 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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21. Molecular path. examination NSCLC Stad. IV with Adeno-Ca. o. adenosquamous Ca. (GL QI 1)
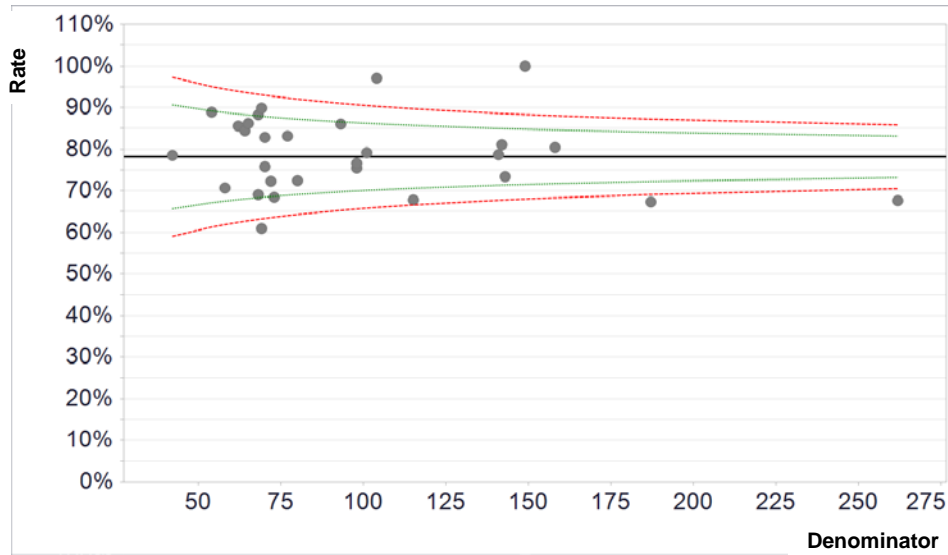
Certification

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with examination of at least EGFR mutations in exons 18-21 and/or ALK fusions and/or ROS1 fusions and/or BRAF mutation	62*	33 - 177	2,229
Denominator	Primary cases with adenocarcinoma or adenosquamous carcinoma of the lung stage IV	77*	42 - 262	2,852
Rate	Explanation mandatory*** <50	78.72%	60.87% - 100%	78.16%**
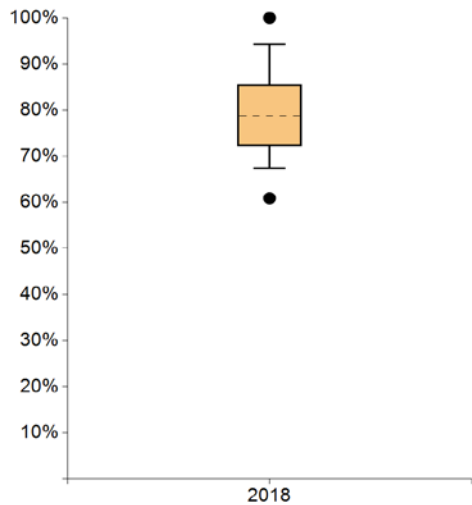
		2014	2015	2016	2017	2018
●	Max	-----	-----	-----	-----	100%
	95th percentile	-----	-----	-----	-----	94.22%
	75th percentile	-----	-----	-----	-----	85.48%
	Median	-----	-----	-----	-----	78.72%
	25th percentile	-----	-----	-----	-----	72.22%
	5th percentile	-----	-----	-----	-----	67.45%
●	Min	-----	-----	-----	-----	60.87%

Clinical sites with evaluable data		Clinical sites within the plausibility corridor	
Number	%	Number	%
50	97.83%	45	90.00%

Comments:
The indicators relating to molecular pathological examinations were collected for the first time in indicator year 2018 and were not mandatory. 29 of the 55 Centres provided evaluable data. Of these, none fell below the 50% quota, which is accompanied by an obligation to provide reasons.

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** 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.

22. First-line therapy with EGFR TKI b. NSCLC Stad. IV with activating EGFR mutation and ECOG 0-2 (GL QI 2)
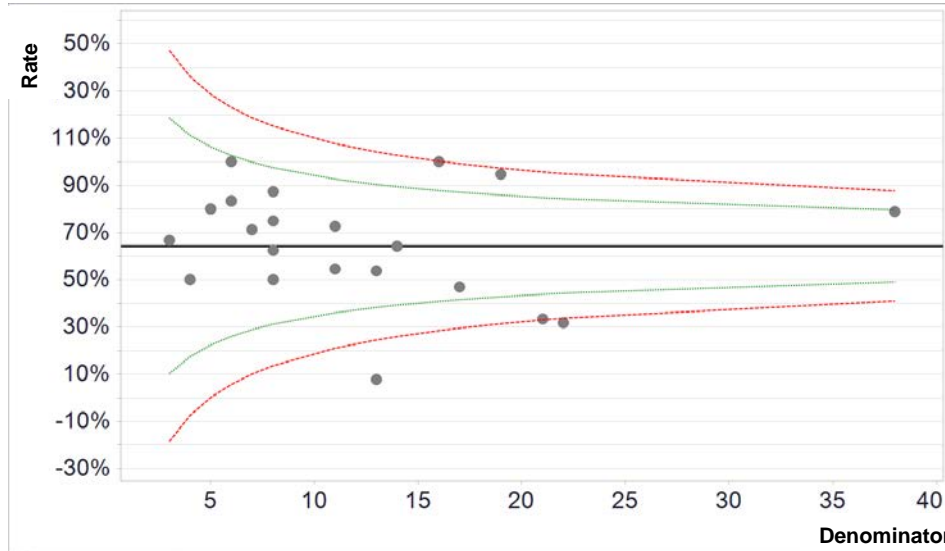
	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with the start of a first-line therapy with EGFR TKI	6*	1 - 30	179
Denominator	Primary cases with NSCLC stage IV, activating EGFR mutation and ECOG 0-2	8*	3 - 38	278
Rate	Explanation mandatory*** <30%	71.43%	7.69% - 100%	64.39%**
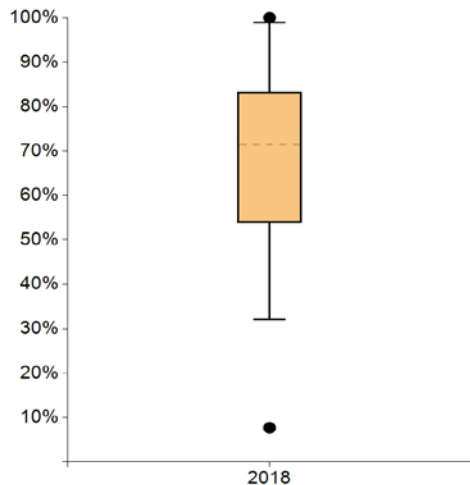
		2014	2015	2016	2017	2018
●	Max	-----	-----	-----	-----	100%
	95th percentile	-----	-----	-----	-----	98.95%
	75th percentile	-----	-----	-----	-----	83.33%
	Median	-----	-----	-----	-----	71.43%
	25th percentile	-----	-----	-----	-----	53.85%
	5th percentile	-----	-----	-----	-----	32.12%
●	Min	-----	-----	-----	-----	7.69%

| Clinical sites with evaluable data		Clinical sites within the plausibility corridor	
Number	%	Number	%
25	45.45%	24	96.00%

Comments:
Information on the quality indicator was voluntary in audit year 2019. Of the 25 Centres that submitted data, 24 Centres achieved the rate of at least 30%. The low number of patients in the denominator leads to a high dispersion of the results of this indicator. The only Centre with a quota of less than 30% that had to substantiate its results stated that in the majority of cases TKI therapy was initiated by the practise-based oncologist after discharge.

* 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.

23. First-line therapy with ALK specific TKI therapy for pat. with ALK pos. NSCLC in stage IV (GL QI 3)

Rate
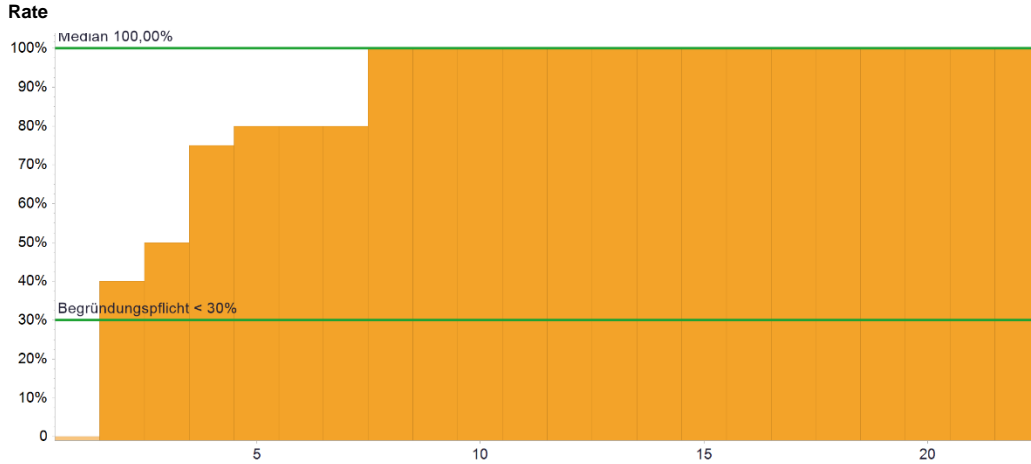
22 clinical sites

Begründungspflicht = mandatory statement of reasons

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with start of ALK specific TKI therapy	2*	0 - 5	50
Denominator	Primary cases with NSCLC stage IV, ALK pos.	2*	1 - 5	60
Rate	Explanation mandatory*** <30	100%	0.00% - 100%	83.33%**
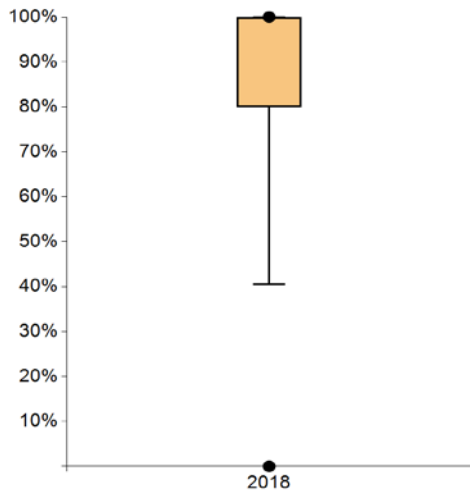
		2014	2015	2016	2017	2018
●	Max	-----	-----	-----	-----	100%
	95th percentile	-----	-----	-----	-----	100%
	75th percentile	-----	-----	-----	-----	100%
	Median	-----	-----	-----	-----	100%
	25th percentile	-----	-----	-----	-----	80.00%
	5th percentile	-----	-----	-----	-----	40.50%
●	Min	-----	-----	-----	-----	0.00%

| Clinical sites with evaluable data		Clinical sites within the plausibility corridor	
Number	%	Number	%
22	40.00%	21	95.45%

Comments:
Information on the quality indicator was voluntary in audit year 2019.The maximum number of patients in the denominator that could be considered was 5 patients. Only one of the Centres that had submitted data for this indicator was required to give reasons at a rate of 0% (only 1 patient in the denominator). The Centre explained that this patient was re-biopsied after initially being ALK negative and subsequently tested ALK positive. TKI therapy was initiated as a result.

* 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.

24. First-line therapy with ROS1 specific TKI therapy for pat. with ROS1 pos. NSCLC in stadium IV (GL QI 4)
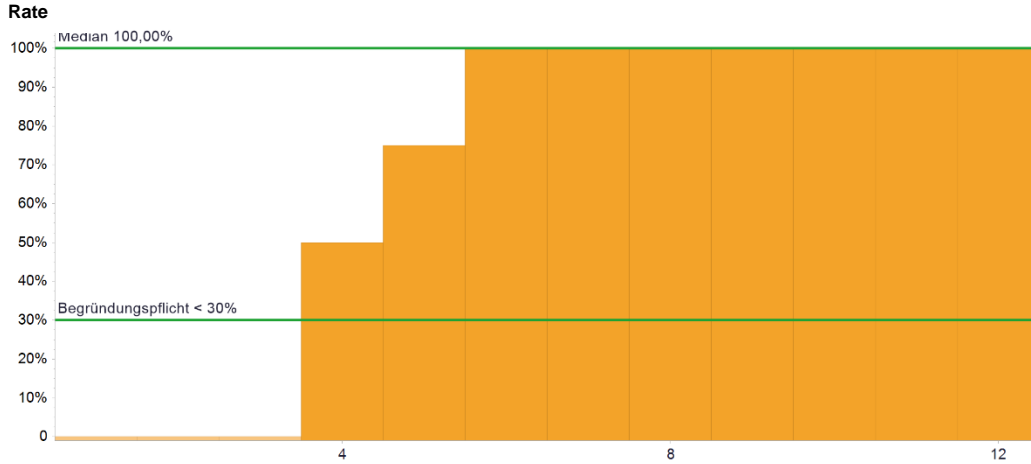
Rate

Begründungspflicht = mandatory statement of reasons

12 clinical sites

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with start of ROS1-specific TKI therapy	1*	0 - 3	12
Denominator	Primary cases with NSCLC stage IV, ROS1- positive	1*	1 - 4	18
Rate	Explanation mandatory*** <30	100%	0.00% - 100%	66.67%**
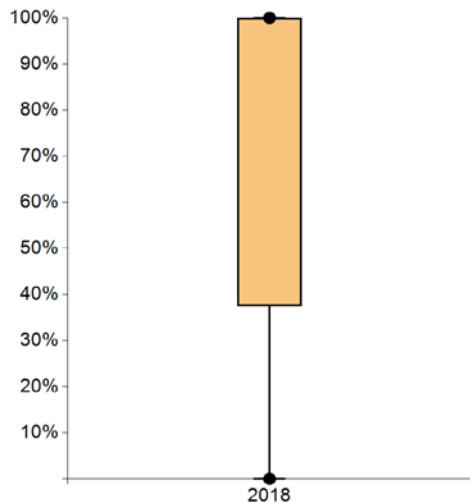
		2014	2015	2016	2017	2018
●	Max	-----	-----	-----	-----	100%
	95th percentile	-----	-----	-----	-----	100%
	75th percentile	-----	-----	-----	-----	100%
	Median	-----	-----	-----	-----	100%
	25th percentile	-----	-----	-----	-----	37.50%
	5th percentile	-----	-----	-----	-----	0.00%
●	Min	-----	-----	-----	-----	0.00%

| Clinical sites with evaluable data		Clinical sites within the plausibility corridor	
Number	%	Number	%
12	21.82%	9	75.00%

Comments:
The low number of only 12 Centres with evaluable data, also in comparison with the other indicators for drug-based tumour therapy, is due to the fact that 10 Centres did not treat any ROS-1-positive primary cases in the indicator year. As expected, the denominator for the remaining Centres is small. Of these, 3 achieved a rate of less than 30%. The reason given was that patients had died before initiation of therapy, the therapy was initiated by the practice-based oncologist, the therapy was rejected by the patient and that the molecular pathological findings were only available after initiation of palliative chemotherapy, whereupon a switch to ROS-1-specific therapy was made.

* 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.

25. Combined radio-chemotherapy for SCLC Stad. IIB - IIIB (GL QI 8)
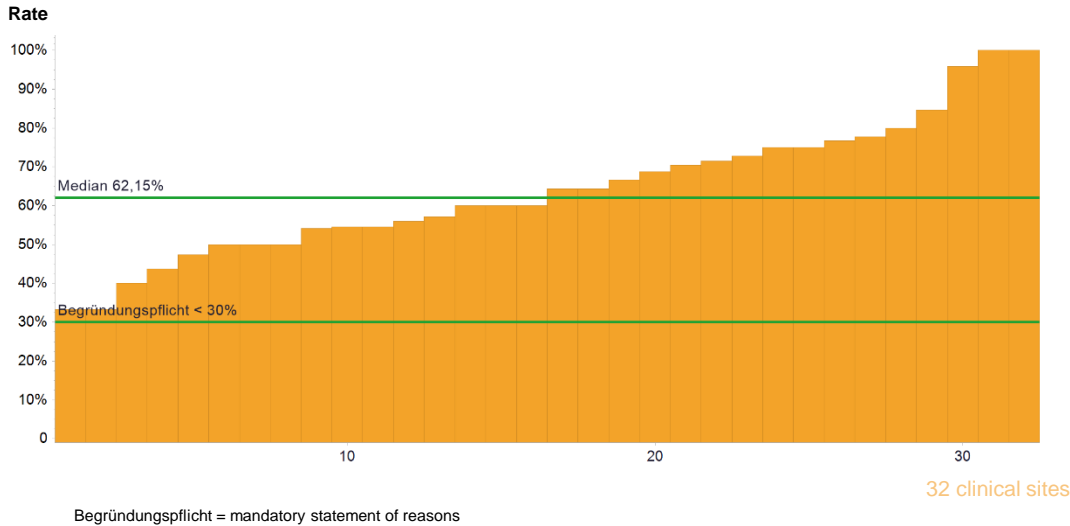
Begründungspflicht = mandatory statement of reasons

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with radiochemotherapy	6,5*	1 - 46	306
Denominator	Primary cases SCLC stage IIB [T3] - IIIC [TNM: cT1/2 N2-3 M0, cT3/4 N0-3 M0] and ECOG 0/1	12*	1 - 60	472
Rate	Explanation mandatory*** <30%	62.15%	33.33% - 100%	64.83%**
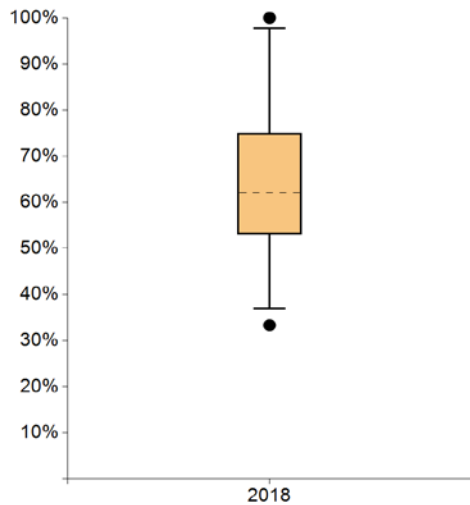
		2014	2015	2016	2017	2018
●	Max	-----	-----	-----	-----	100%
	95th percentile	-----	-----	-----	-----	97.71%
	75th percentile	-----	-----	-----	-----	75.00%
	Median	-----	-----	-----	-----	62.15%
	25th percentile	-----	-----	-----	-----	53.13%
	5th percentile	-----	-----	-----	-----	37.00%
●	Min	-----	-----	-----	-----	33.33%

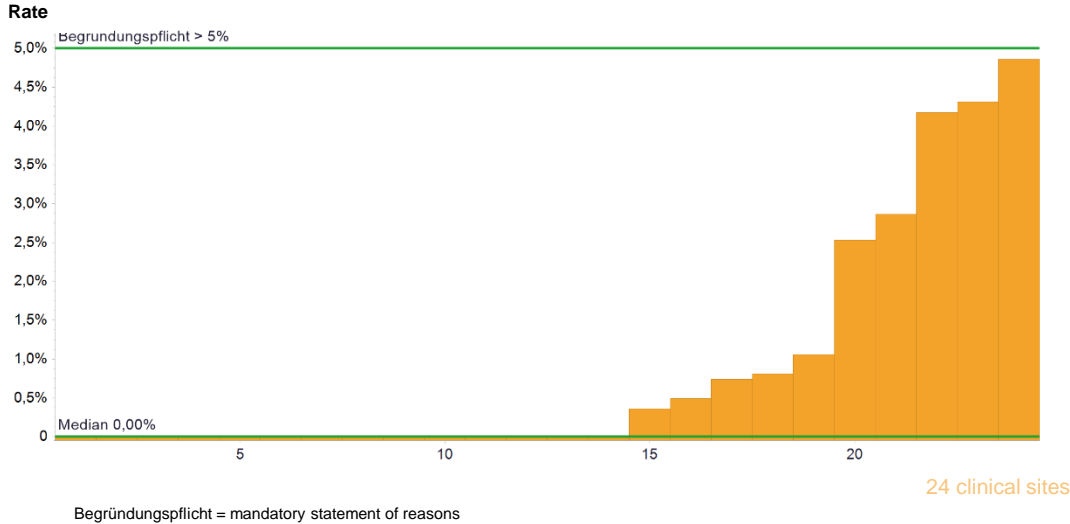| Clinical sites with evaluable data		Clinical sites within the plausibility corridor	
Number	%	Number	%
32	58.18%	32	100.00%

Comments:
All 32 Centres that provided data for this indicator, which was collected for the first time, achieved a rate of at least 30%. Overall, a broad spread of the rates is striking, but this should be seen against the background of low patient numbers.

* 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.

26. CTCAE grade V on systemic therapy

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Rate

Begründungspflicht > 5%

Median 0,00%

24 clinical sites

Begründungspflicht = mandatory statement of reasons

	Definition of indicator	All clinical sites 2018		
		Median	**Range**	**Patients Total**
Numerator	Primary cases with CTCAE grade V under systemic therapy	0*	0 - 7	36
Denominator	Primary cases stage III or IV with systemic therapy	144*	35 - 483	4,096
Rate	Explanation mandatory*** >5%	0.00%	0.00% - 4.86%	0.88%**
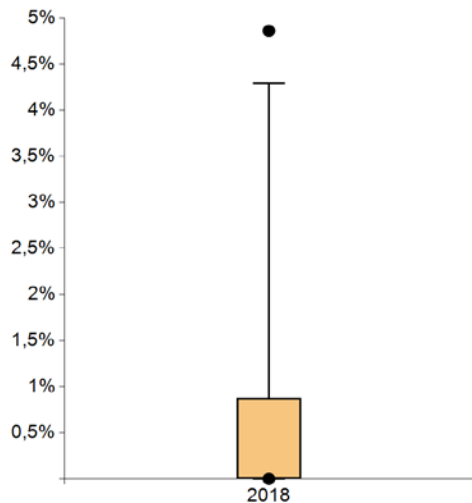
		2014	2015	2016	2017	2018
●	Max	-----	-----	-----	-----	4.86%
	95th percentile	-----	-----	-----	-----	4.29%
	75th percentile	-----	-----	-----	-----	0.87%
	Median	-----	-----	-----	-----	0.00%
	25th percentile	-----	-----	-----	-----	0.00%
	5th percentile	-----	-----	-----	-----	0.00%
●	Min	-----	-----	-----	-----	0.00%

Clinical sites with evaluable data		Clinical sites within the plausibility corridor	
Number	%	Number	%
24	43.64%	24	100.00%

Comments:
All 24 Centres with evaluable data remained below the rate of 5% of patients who died under systemic therapy. 14 of these Centres recorded no deaths at all, 4 had a value between 0 and 1%.

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** 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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