



Annual Report 2020

of the Certified Skin Cancer Centres

Audit year 2019 / Indicator year 2018

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General information

Indicator No. 7: Sentinel node biopsy (SNB)
Indicator No. 8: Surgical interventions with safety margin defined in the Guideline.....
Indicator No. 9: Surgical interventions with histological margin control.....
Indicator No. 10: Revision surgery after secondary bleeding.....
Indicator No. 11: Revision surgery in the case of secondary bleeding after SNB and LND..
Indicator No. 12: Post-operative wound infections.....
Indicator No. 13: Malignant melanoma: Sentinel node biopsy (GL QI)
Indicator No. 14: Malignant melanoma: Post-operative radiotherapy (GL QI)

Quality indicators of the guidelines (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

	Kennzahldefinition	Alle Standorte 2017		
		Median	Range	Patienten Gesamt
numerator	Pat. mit malignem Melanom, die in eine Studie mit Ethikvotum eingebracht wurden	19,5*	2 - 135	940
denominator	Primärfälle mit malignem Melanom Stad. III - IV	25*	3 - 172	833
Quote	Sollvorgabe ≥ 5%	93,90%	15,38% - 800,00%	112,85%**

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 indicator is given.

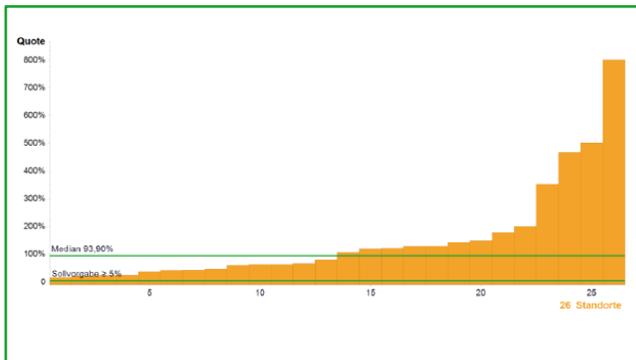
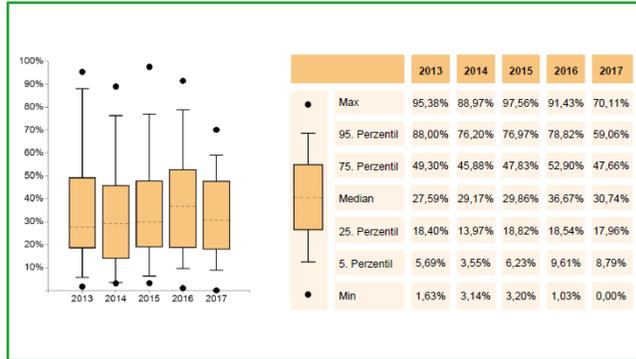


Diagram:

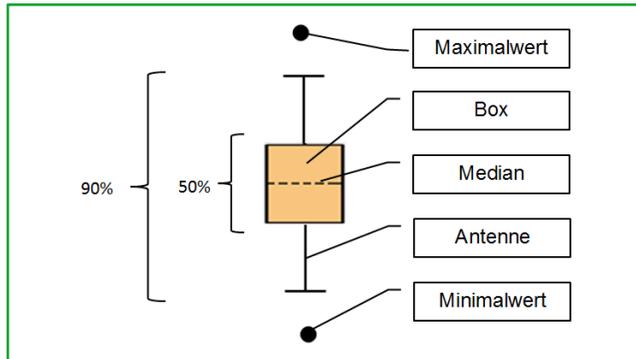
The x-axis indicates the number of Centres, the y-axis gives the values in percent or number (e.g. primary cases). The target value is depicted as a horizontal green line. The median, which is also depicted as a green horizontal line, divides the entire group into two equal halves.

General information



Cohort development:

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 Skin Cancer Centres 2019

	31.12.2019	31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014
Ongoing Procedures	3	4	2	5	7	2
Certified Centres	70	63	61	55	47	43
Certified Clinical Sites	70	63	61	55	47	43

Clinical sites taken into account

	31.12.2019	31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014
Clinical sites included in the Annual Report	67	26	54	52	44	41
equivalent to	95.7%	41.27%	88.52%	94.5%	93.6%	95.3%
Primary cases total*	13,740	5,423	11,584	10,986	9,872	8,898
Primary cases per clinical site (mean)*	205.1	208.6	215	211.3	224.4	217.0
Primary cases per clinical site (median)*	176.0	163.5	179.5	183.5	190.5	189

* The numbers refer to the malignant melanomas from the clinical sites included in the Annual Report.

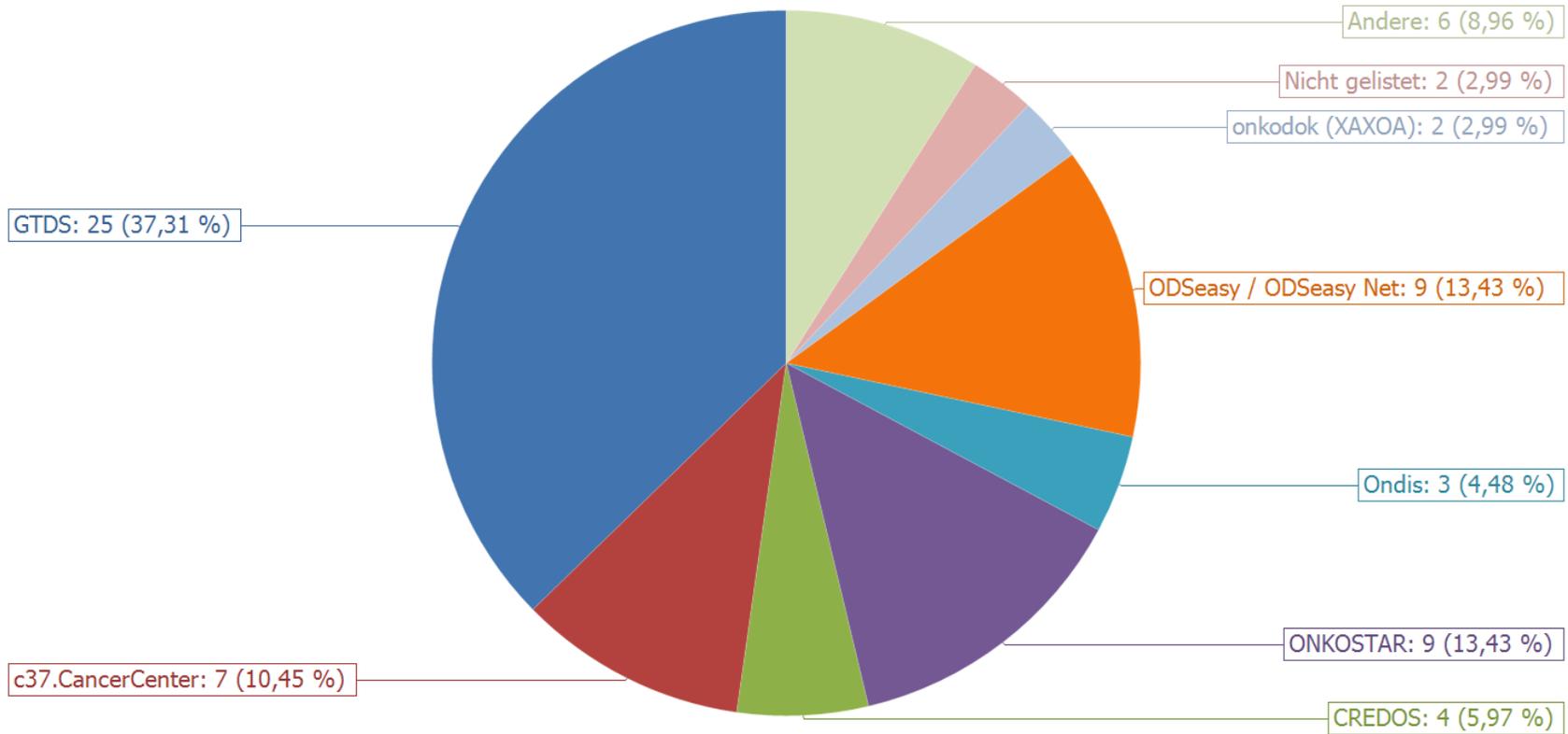
This annual report looks at the skin cancer centres certified in the certification system of the German Cancer Society. The basis for the diagrams in the annual report is the data sheet.

The annual report includes 67 of 70 certified center sites. Excluded are 3 sites that were certified for the first time in 2019 (data mapping of the complete calendar year is not mandatory for initial certifications). A total of 14,039 primary cases of malignant melanoma were treated at all 70 sites.

An up-to-date overview of all certified sites is available at www.oncomap.de.

The indicators published here refer to the key figure year 2018 and represent the evaluation basis for the audits conducted in 2019.

Tumour documentation systems in the Centre's clinical sites

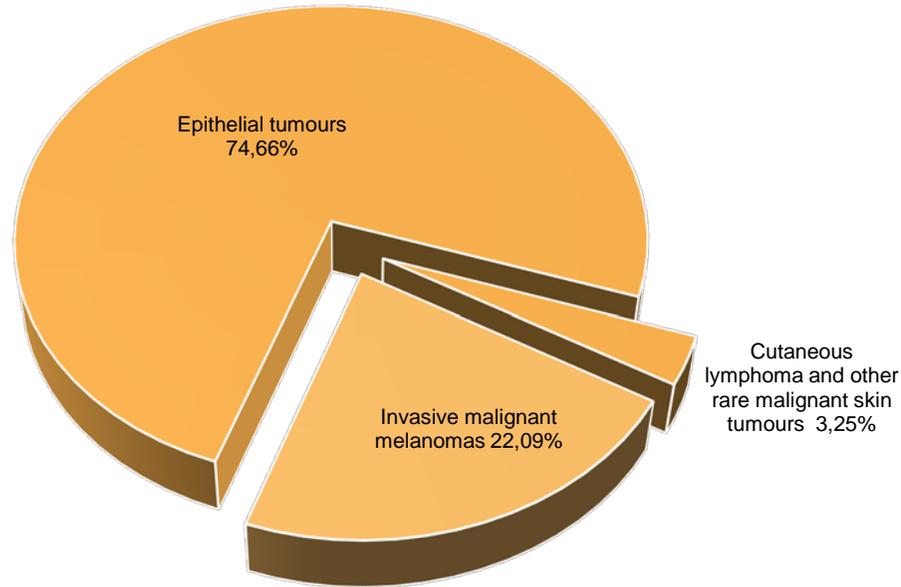


Legend:	
Other	Systems only used at one clinical site

The information on the tumour documentation system was taken from the data sheet (Basic Data Sheet). It is not possible to specify several systems. In many cases, support is provided by the cancer registries or there may be a direct link to the cancer registry via a specific tumor documentation system.

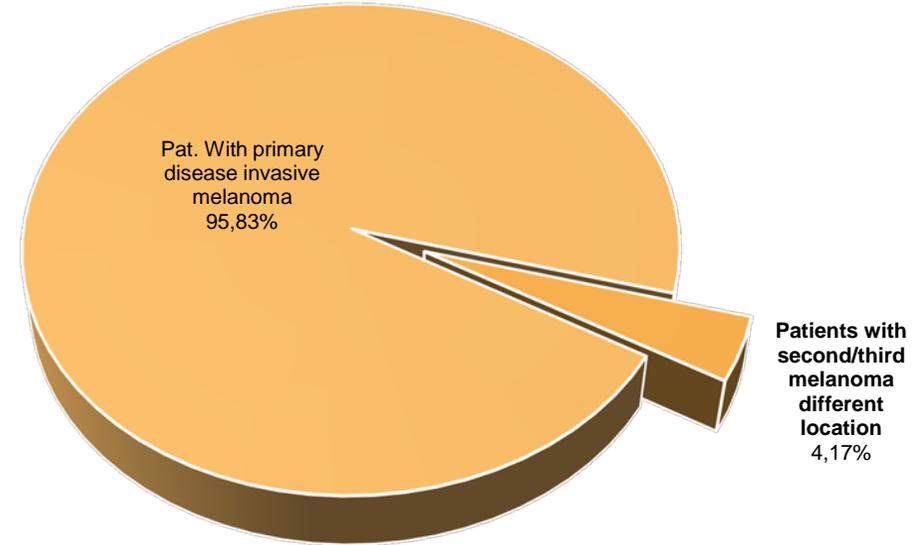
Basic data – Stage distribution primary cases

Distribution primary case patients



Invasive malignant melanomas	13,740 (22.09%)
Epithelial tumours (excl. <i>in situ</i>)	46,449 (74.66%)
Cutaneous lymphomas and other rare malignant skin tumours (angiosarcoma. Merkel, DFSP. etc.)	2,024 (3.25%)
Total	62,213 (100%)

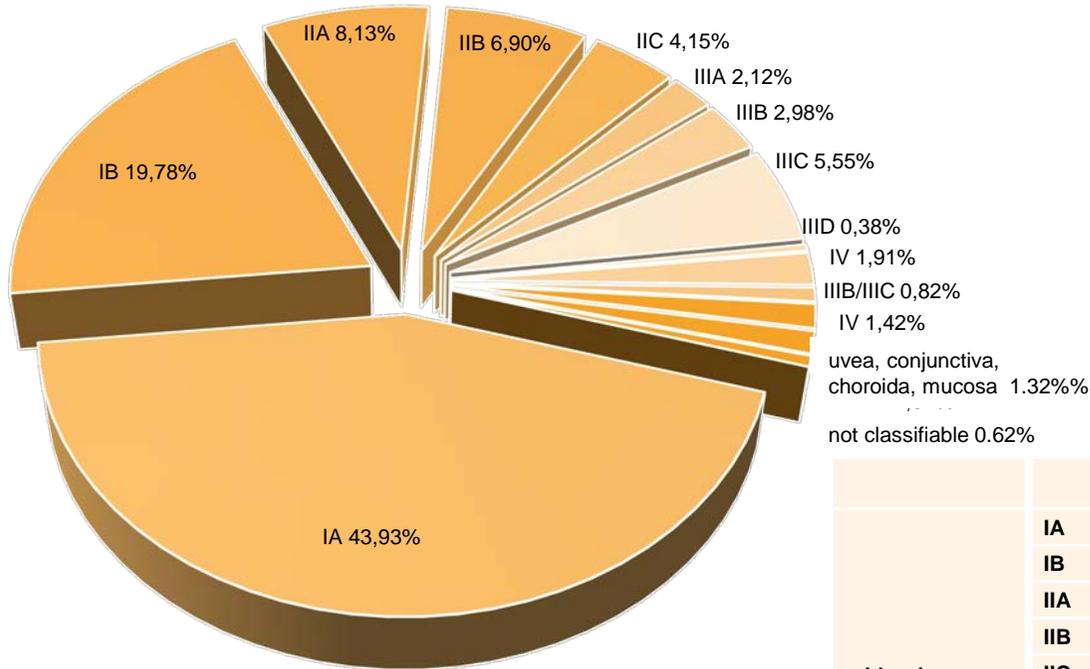
Distribution primary case patients Invasive melanoma



Patients with primary disease invasive melanoma	13,167 (95.83%)
Patients with second/third melanoma different location	573 (4.17%)
Total	13,740 (100%)

Basic data – Stage distribution primary cases

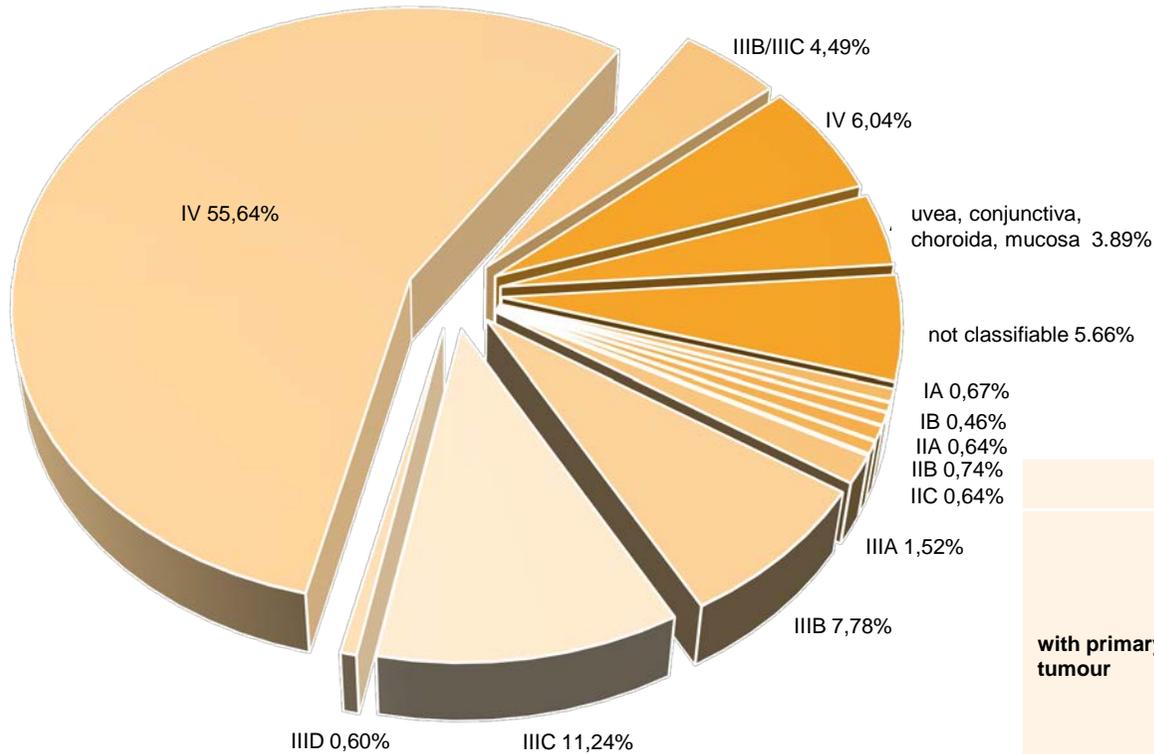
Stage distribution patients with stage shift/recurrence



		Audit Year 2019	Audit Year 2018	Audit Year 2017	Audit Year 2016
with primary tumour	IA	6,036 (43.93%)	2,410 (44.44%)	4,762 (41.11%)	4,600 (41.87%)
	IB	2,718 (19.78%)	1,059 (19.53%)	2,548 (22.00%)	2,403 (21.87%)
	IIA	1,117 (8.13%)	455 (8.39%)	1,006 (8.68%)	939 (8.55%)
	IIB	948 (6.90%)	370 (6.82%)	745 (6.43%)	675 (6.14%)
	IIC	570 (4.15%)	226 (4.17%)	478 (4.13%)	471 (4.29%)
	IIIA	291 (2.12%)	142 (2.62%)	425 (3.67%)	429 (3.90%)
	IIIB	409 (2.98%)	181 (3.34%)	512 (4.42%)	462 (4.21%)
	IIIC	763 (5.55%)	222 (4.09%)	465 (4.01%)	311 (2.83%)
	IIID	52 (0.38%)	24 (0.44%)	-	-
	IV	262 (1.91%)	107 (1.97%)	326 (2.81%)	275 (2.50%)
without primary tumour	IIIB/IIIC	113 (0.82%)	43 (0.79%)	51 (0.44%)	78 (0.71%)
	IV	195 (1.42%)	87 (1.60%)	98 (0.85%)	130 (1.18%)
	Uvea, conjunctiva, choroida, mucosa	181 (1.32%)	53 (0.98%)	107 (0.92%)	90 (0.82%)
	not classifiable	85 (0.62%)	44 (0.81%)	61 (0.53%)	123 (1.13%)
	Total	13,740 (100%)	5,423 (100%)	11,584 (100%)	10,986 (100%)

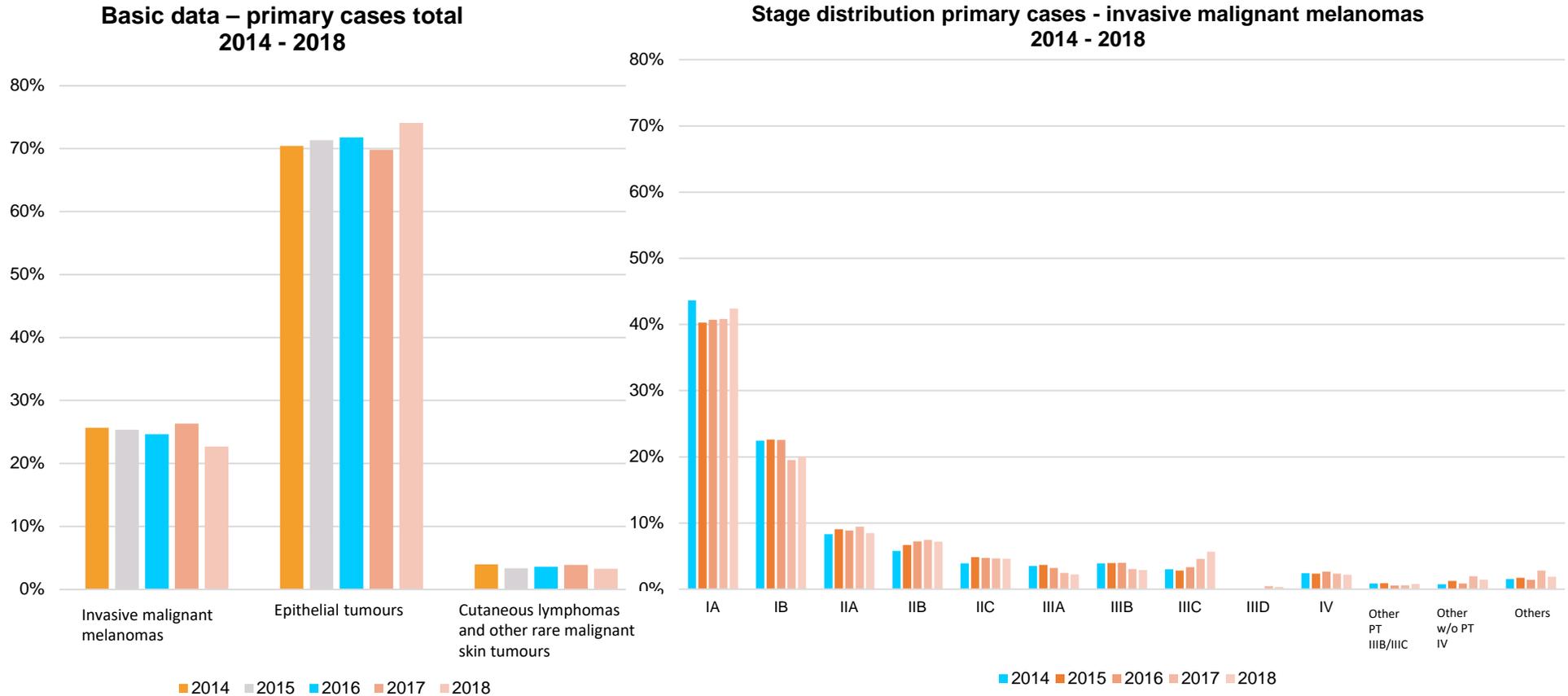
Basic data – Stage distribution primary cases

Stage distribution for patients with stage shift/recurrences



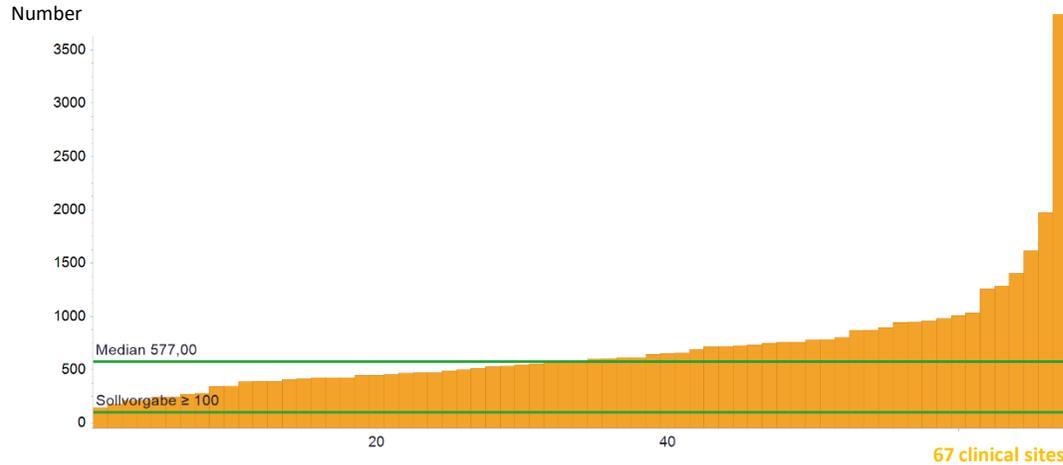
		Audit year 2019	Audit year 2018	Audit year 2017
with primary tumour	IA	19 (0.67%)	9 (0.94%)	22 (0.94%)
	IB	13 (0.46%)	7 (0.73%)	24 (1.02%)
	IIA	18 (0.64%)	8 (0.83%)	34 (1.45%)
	IIB	21 (0.74%)	10 (1.04%)	40 (1.70%)
	IIC	18 (0.64%)	4 (0.42%)	27 (1.15%)
	IIIA	43 (1.52%)	30 (3.13%)	40 (1.70%)
	IIIB	220 (7.78%)	100 (10.43%)	209 (8.90%)
	IIIC	318 (11.24%)	123 (12.83%)	272 (11.58%)
	IIID	17 (0.60%)	13 (1.36%)	-
	IV	1,574 (55.64%)	533 (55.58%)	1,326 (56.45%)
without primary tumour	IIB/IIIC	127 (4.49%)	67 (6.99%)	87 (3.70%)
	IV	171 (6.04%)	48 (5.01%)	120 (5.11%)
	Uvea, conjunctiva, choroida, mucosa	110 (3.89%)	4 (0.42%)	65 (2.77%)
	not classifiable	160 (5.66%)	3 (0.31%)	83 (3.53%)
	Total	2,829 (100%)	959 (100%)	2,349 (100%)

Basic data – Stage distribution primary cases 2013 - 2017



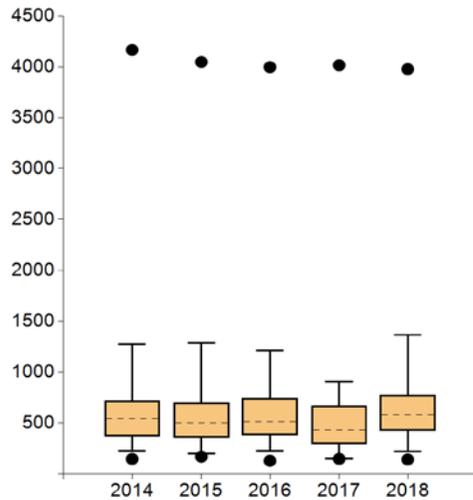
* others: Uvea, conjunctiva, choroida, mucosa / not classifiable

1.1 Epithelial tumours (excl. *in situ*, incl. *inter alia* basal cell carcinomas, squamous cell carcinomas)



	Indicator definition	All Clinical sites 2018		
		Median	Range	Patients total
Number	Primary cases (Def. see 1.1.3)	577	142 – 3,978	46,449
	Target value ≥ 100			

Sollvorgabe = target value



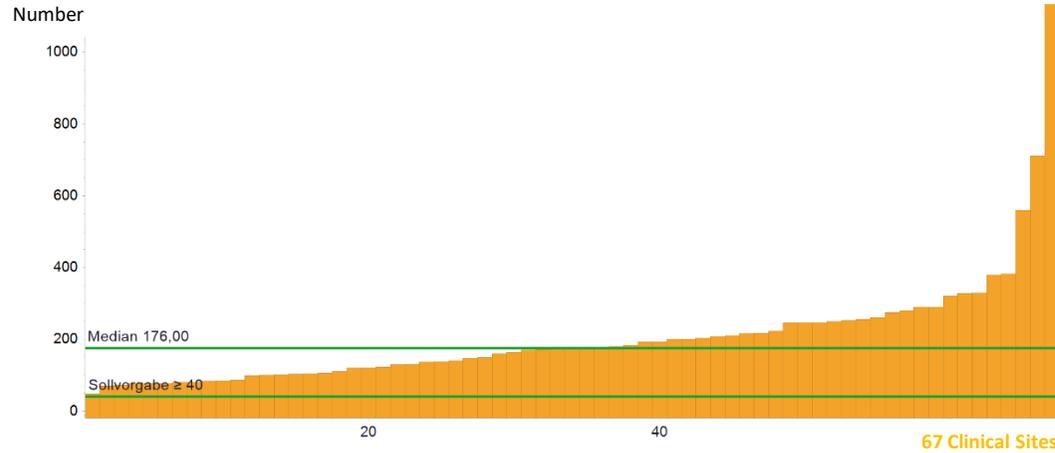
	2014	2015	2016	2017	2018
● Max	4,167.00	4,048.00	3,998.00	4,017.00	3,978.00
95. Percentile	1,273.60	1,286.55	1,207.95	908.75	1,367.30
75. Percentile	716.00	696.25	746.25	671.75	778.50
Median	544.00	502.50	512.00	432.00	577.00
25. Percentile	372.25	357.75	383.00	296.75	425.50
5. Percentile	226.25	198.75	228.35	153.75	223.40
● Min	147.00	171.00	129.00	148.00	142.00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100,00%	67	100,00%

Notes:

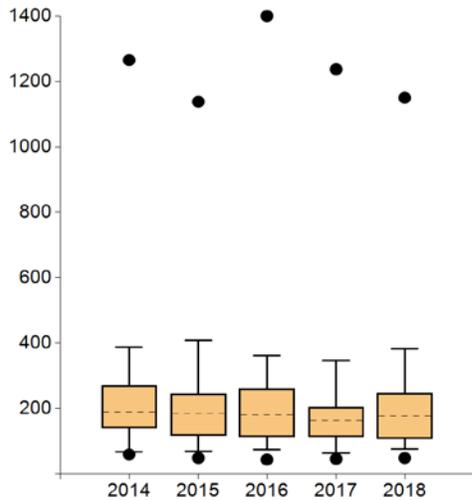
With a significantly increasing median, all centers easily reach the target of at least 100 primary cases of epithelial, non-melanocytic skin tumors. Overall, the total number of primary cases triples compared to the previous year. This enormous leap can be explained by the fact that not all centres had changed their tumour documentation to the new TNM classification in the previous year. At that time, only 26 centres were included in the evaluation of the annual report.

1.2 Invasive malignant melanomas (incl. malignant uveal. conjunctival. choroidal and mucosal melanomas)



	Indicator definition	All clinical sites 2018		
		Median	Range	Patients total
Number	Primary cases (Def. see 1.1.3)	176	49 - 1150	13,740
	Target value ≥ 40			

Sollvorgabe = target value



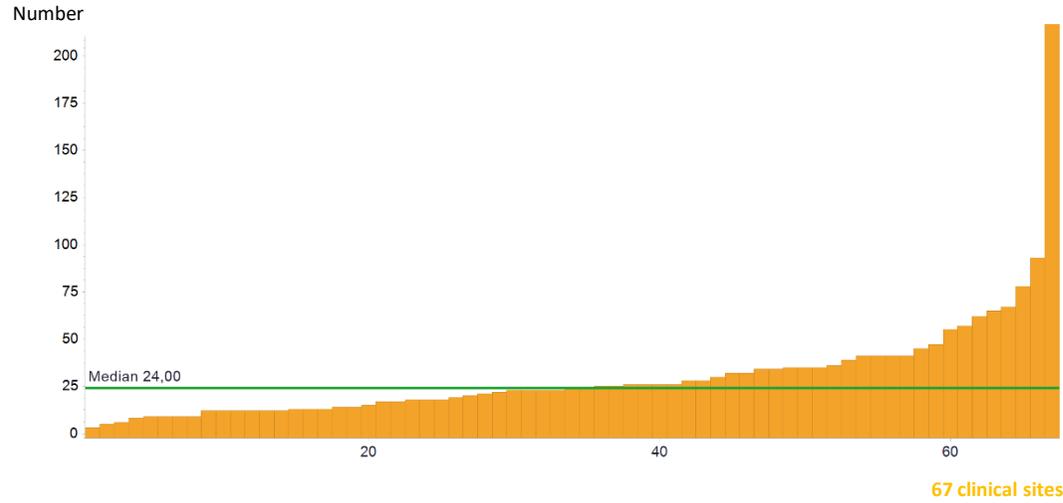
	2014	2015	2016	2017	2018
● Max	1,265.00	1,138.00	1,400.00	1,237.00	1,150.00
95. Percentile	388.45	408.50	361.90	346.25	381.40
75. Percentile	270.25	246.00	259.75	204.25	246.50
Median	190.50	183.50	179.50	163.50	176.00
25. Percentile	139.25	116.75	112.75	112.75	108.00
5. Percentile	67.50	70.00	74.30	63.75	77.00
● Min	60.00	49.00	44.00	46.00	49.00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	67	100.00%

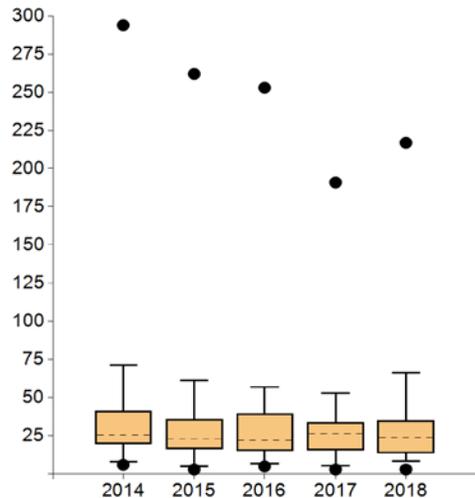
Notes:

The large increase in the total number of primary cases from 5,423 to 13,740 is due, as with code number 1.1, to the fact that the new TNM classification was not yet fully established in the centres. At the same time, the median number of malignant melanomas treated in the certified centres rises to 176 primary cases. With a slightly decreasing maximum value or decreasing spread, all centres continue to reach the required minimum number of at least 40 primary cases with malignant melanoma.

1.3 Cases with cutaneous lymphoma and rare, malignant skin tumours



	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Number	Primary cases (Def. see 1.1.3)	24	3 - 217	2,024
	No target value			

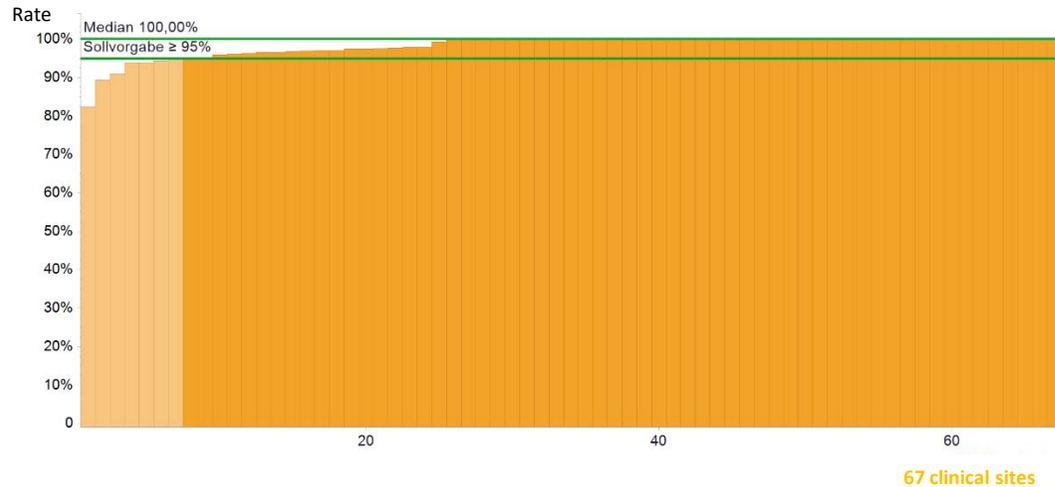


		2014	2015	2016	2017	2018
●	max	294.00	262.00	253.00	191.00	217.00
	95 th percentile	71.00	61.40	56.75	53.00	66.40
	75 th percentile	41.50	36.00	39.50	33.75	35.00
	Median	25.50	23.00	22.00	26.50	24.00
	25 th percentile	19.75	16.25	15.25	15.50	13.50
	5 th percentile	8.00	5.00	7.00	5.25	8.30
●	Min	6.00	3.00	5.00	3.00	3.00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	-----	-----

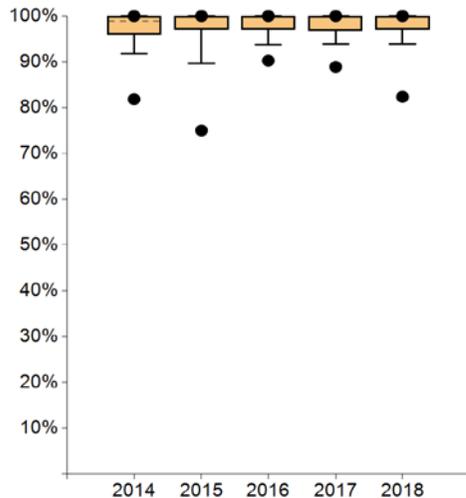
Notes:
 The developments of the indicators 1.1 and 1.2 caused by the change in the TNM documentation are also reflected in the cutaneous lymphomas and rare malignant skin tumours. In contrast to the other two indicators, the median number of patients treated in the centres decreases slightly. The spread of case numbers continues to increase with a range of 3 to 217.

2. Discussion of cases with new remote metastases



Sollvorgabe = target value

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Numerator	Cases with new remote metastases (no locoregional metastases) which were presented in the tumour conference	29*	3 - 165	2,371
Denominator	Cases with new remote metastases (no locoregional metastases)	29*	3 - 165	2,413
Rate	Target value ≥ 95%	100%	82.35% - 100%	98.26%**



	2014	2015	2016	2017	2018
Max	100%	100%	100%	100%	100%
95. Percentile	100%	100%	100%	100%	100%
75. Percentile	100%	100%	100%	100%	100%
Median	98.87%	100%	100%	100%	100%
25. Percentile	95.96%	97.02%	97.04%	96.81%	97.06%
5. Percentile	91.77%	89.64%	93.78%	93.81%	93.81%
Min	81.82%	75.00%	90.24%	88.89%	82.35%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	60	89.55%

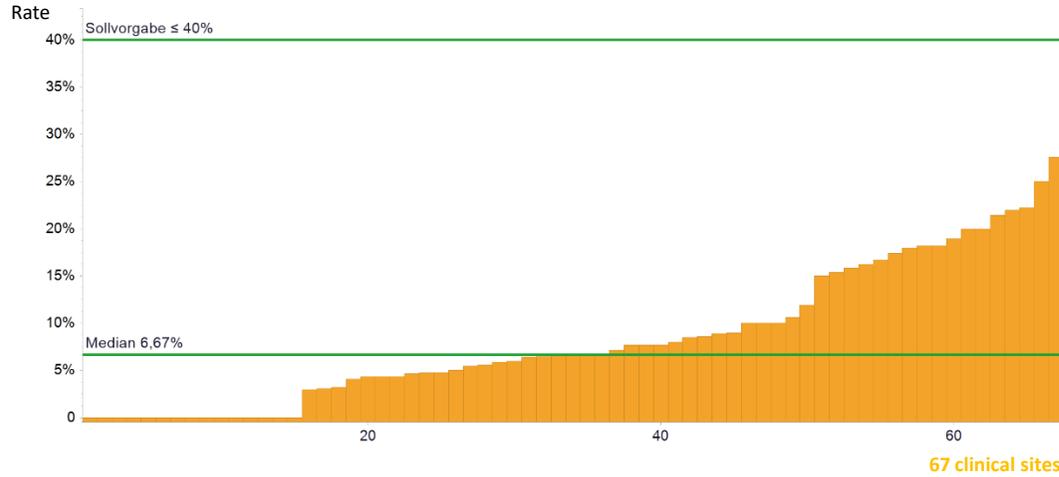
Notes:

9 out of 10 centres succeed in presenting at least 95% of patients with newly occurring distant metastases in the tumour conference. The 7 centers below the target had predominantly low patient numbers as a denominator, which is why 5 of them fell below the target due to only one patient. In most cases, patients were not presented because they had died before the date of the tumor conference. This was confirmed in the audits.

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

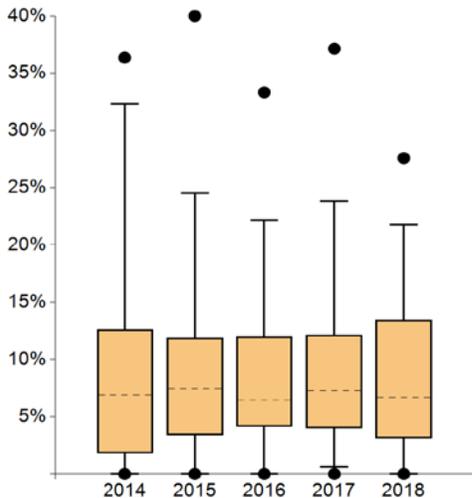
** Percentage of total patients treated in centers according to the numerator.

3. Therapy deviation from recommendation tumour conference



Sollvorgabe = target value

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients total
Numerator	Cases with new remote metastases (no locoregional metastases) which were presented in the tumour conference and involved a therapy deviation	2*	0 - 15	205
Denominator	Cases with new remote metastases (no locoregional metastases) which were presented in the tumour conference (= numerator Indicator 2)	29*	3 - 165	2,371
Rate	Target value ≤ 40%	6.67%	0.00% - 27.59%	8.65%**



	2014	2015	2016	2017	2018
● Max	36.36%	40.00%	33.33%	37.14%	27.59%
95. Percentile	32.28%	24.50%	22.13%	23.85%	21.79%
75. Percentile	12.64%	11.88%	12.00%	12.15%	13.45%
Median	6.88%	7.42%	6.47%	7.30%	6.67%
25. Percentile	1.83%	3.41%	4.13%	4.00%	3.13%
5. Percentile	0.00%	0.00%	0.00%	0.63%	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	%
67	100.00%	67	100.00%

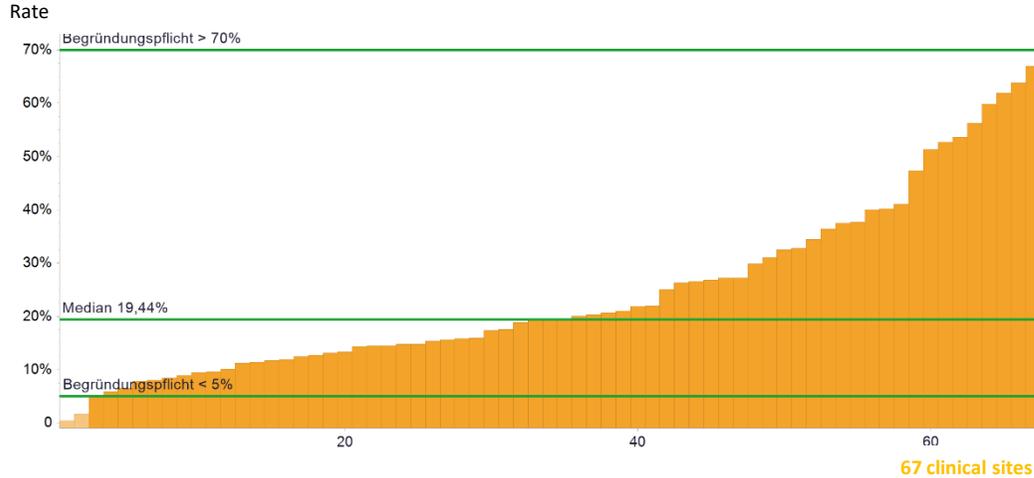
Notes:

All centers meet the target, according to which in a maximum of 40% of cases with newly occurring distant metastases, a deviation from the therapy recommendation of the tumor conference should be made. In the explanations of the centres, the rejection by the patients or new/differing findings for changes in therapy were usually claimed. 15 centres followed the recommendation of the tumour conference in all cases. Overall, the rate of deviations in terms of median, maximum value and rates of the individual centres (14 with decreasing, 10 with increasing rates) shows a decreasing tendency.

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

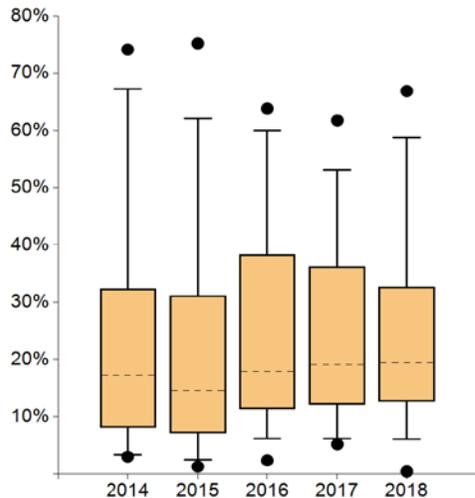
** Percentage of total patients treated in centers according to the numerator.

4. Psycho-oncological care



Begründungspflicht = mandatory statement for reason

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Numerator	Primary cases (= key figure 1.2) + cases with newly occurring distant metastases (no locoregional metastases) that have received psycho-oncological inpatient or outpatient care (Call duration ≥ 25 min.)	46*	1 - 196	3,640
Denominator	Primary cases (= Indicator 1.2) + cases with new remote metastases (no locoregional metastases) (= denominator Indicator 2).	209*	55 - 1271	16,153
Rate	Mandatory statement of reasons*** < 5% and >70%	19.44%	0.45% - 66.90%	22.53%**



	2014	2015	2016	2017	2018
● Max	74.14%	75.20%	63.83%	61.76%	66.90%
95. Percentile	67.23%	62.02%	59.97%	53.03%	58.76%
75. Percentile	32.34%	31.13%	38.32%	36.27%	32.61%
Median	17.14%	14.53%	17.95%	19.08%	19.44%
25. Percentile	8.10%	7.18%	11.41%	12.10%	12.59%
5. Percentile	3.33%	2.43%	6.23%	6.19%	6.06%
● Min	3.02%	1.30%	2.36%	5.20%	0.45%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
67	100.00%	65	97.01%

Notes:

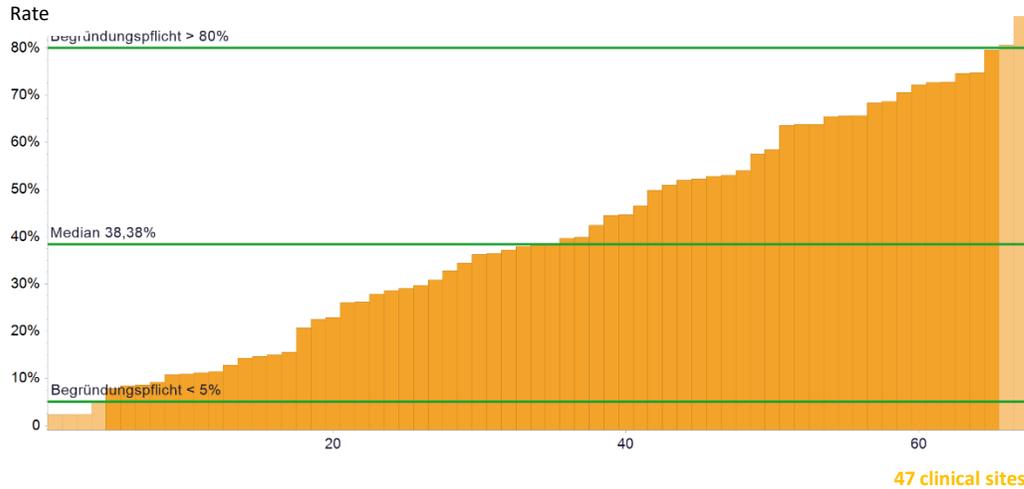
Psycho-oncological care is still very well established in the centres. Only 2 of the 67 centres (previous year: none of the 26 centres in the annual report) fell below the lower plausibility limit of 5%. One of these centres was located abroad, where psycho-oncological care is often organised by the family doctor. However, screening was regularly carried out at the clinic. The other centre failed to implement the instructions for screening for psycho-oncological care needs. The audit revealed a deviation and called for an action plan to remedy the problem.

*The median for numerator and denominator does not refer to an existing centre, 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.

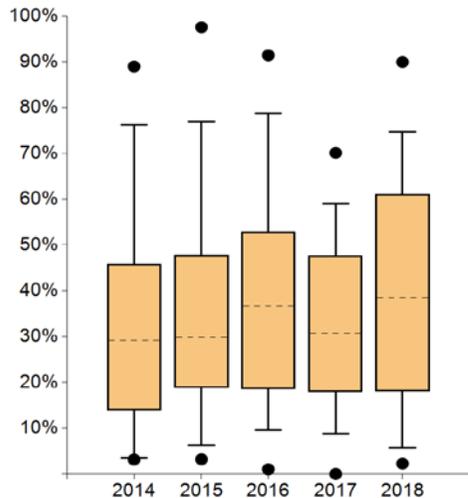
*** For values outside the plausibility limit(s), the centers are required to provide a justification.

5. Counselling social services



Begründungspflicht = mandatory statement for reason

	Indicator definition	All clinical sites 2016		
		Median	Range	Patients Total
Numerator	Primary cases (= Indicator 1.2) + cases with new remote metastases (no locoregional metastases) which received social services counselling in an inpatient or outpatient setting	66*	2 - 391	5,995
Denominator	Primary cases (= Indicator 1.2) + cases with new remote metastases (no locoregional metastases) (= denominator Indicator 2).	209*	55 - 1271	16,153
Rate	Mandatory statement of reasons** < 5% and >80%	38.38%	2.26% - 89.95%	37.11%**



	2014	2015	2016	2017	2018
● Max	88.97%	97.56%	91.43%	70.11%	89.95%
95. Percentile	76.20%	76.97%	78.82%	59.06%	74.70%
75. Percentile	45.88%	47.83%	52.90%	47.66%	61.01%
Median	29.17%	29.86%	36.67%	30.74%	38.38%
25. Percentile	13.97%	18.82%	18.54%	17.96%	18.07%
5. Percentile	3.55%	6.23%	9.61%	8.79%	5.75%
● Min	3.14%	3.20%	1.03%	0.00%	2.26%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
67	100.00%	61	91.04%

Notes:

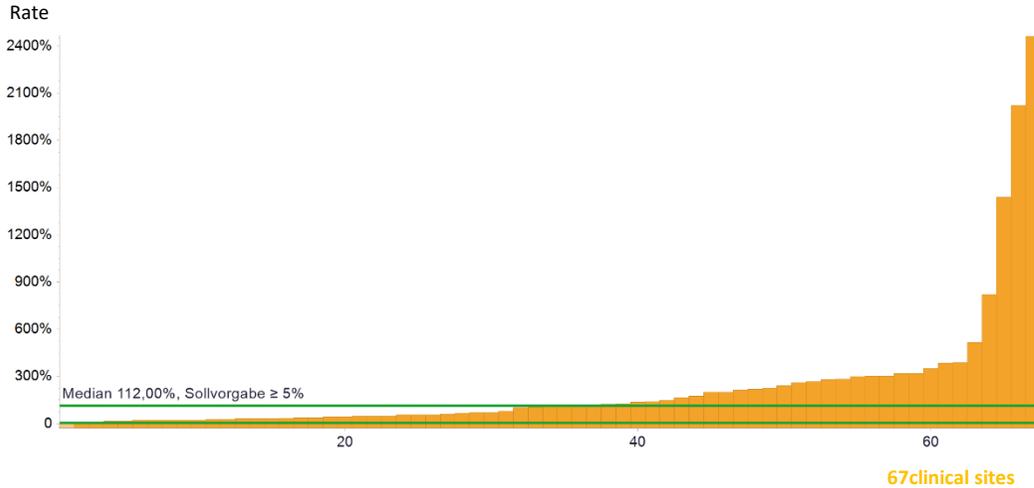
The median increases compared to the previous year, but comparability is limited due to the high number of centres newly included in the annual report (see key figure 1.1). 4 of the 6 centres outside the plausibility limits fell below a counselling rate of 5%, of which 3 centres were located abroad, where the responsibilities for social counselling are regulated differently. The remaining centre only informed all patients by means of a flyer about the possibility of outpatient social counselling, thus achieving a far below average rate.

*The median for numerator and denominator does not refer to an existing centre, 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.

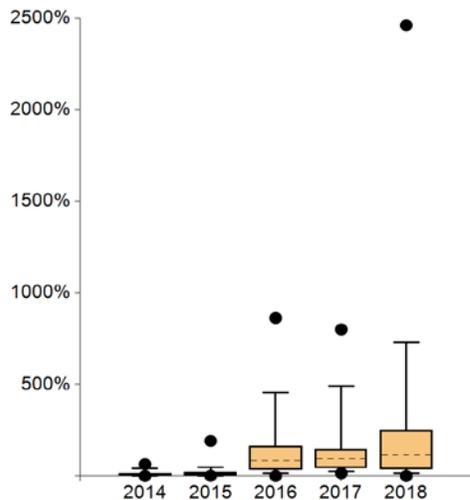
*** For values outside the plausibility limit(s), the centers are required to provide a justification.

6. Malignant melanoma: Study participation



Sollvorgabe = target value

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Numerator	Patients with a malignant melanoma who were included in a study with an ethical vote	25*	0 - 738	3,779
Denominator	Primary cases with a malignant melanoma stage III - IV	28*	6 - 168	2,171
Rate	Target value ≥ 5%	112.00%	0.00% - 2,460.00%	174.07%**



	2014	2015	2016	2017	2018
Max	64.38%	191.55%	862.50%	800.00%	2,460.00%
95. Percentile	39.53%	47.79%	455.12%	491.67%	728.80%
75. Percentile	14.07%	20.83%	163.24%	146.43%	249.22%
Median	6.73%	13.14%	83.55%	93.90%	112.00%
25. Percentile	3.41%	5.88%	35.12%	44.10%	37.27%
5. Percentile	0.74%	1.84%	15.27%	22.70%	14.47%
Min	0.00%	1.12%	0.00%	15.38%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	66	98.51%

Notes:

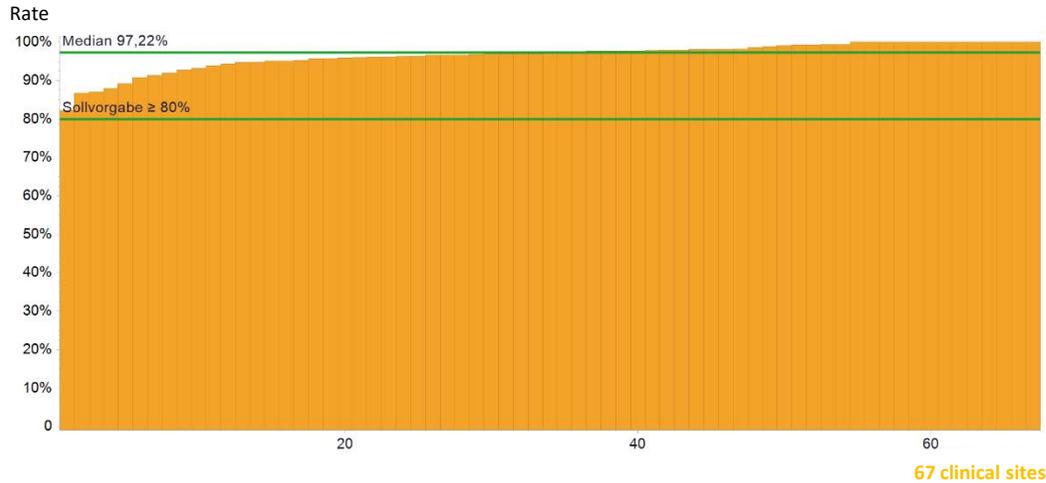
With a median of 112%, the study rate has risen significantly and appears very high in comparison with other tumor entities. Since the numerator of this ratio is not a subset of the denominator and the inclusion of a patient in several studies is also possible, participation in registry and biobank studies in particular provides for very high values in some cases. The only centre below the target was first certified in 2018 and did not enrol the first patients in a study until 2019. This means that no study patients were (yet) registered in the indicator year 2018.

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

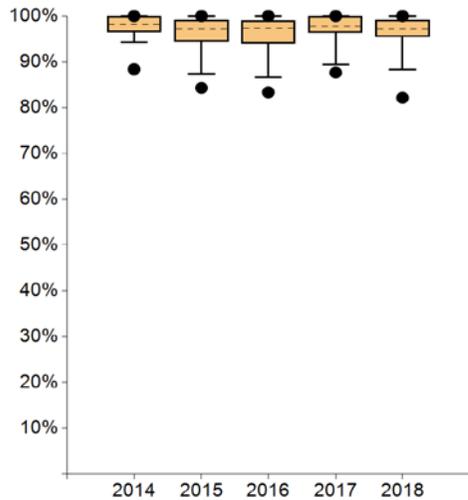
** Percentage of total patients treated in centers according to the numerator.



7. Sentinel node biopsy (SNB)



Sollvorgabe = target value



	2014	2015	2016	2017	2018
Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	99.16%	98.99%	100%	99.18%
Median	98.08%	97.21%	97.30%	97.66%	97.22%
25 th percentile	96.52%	94.44%	93.95%	96.42%	95.40%
5 th percentile	94.29%	87.36%	86.59%	89.34%	88.25%
Min	88.37%	84.29%	83.33%	87.65%	82.14%

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Numerator	Patients with sentinel lymph node confirmed intra-operatively	70*	20 - 342	5,723
Denominator	Patients who have had surgery with SNB	73*	20 - 393	5,963
Rate	Target value ≥ 80%	97.22%	82.14% - 100%	95.98%**

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	67	100.00%

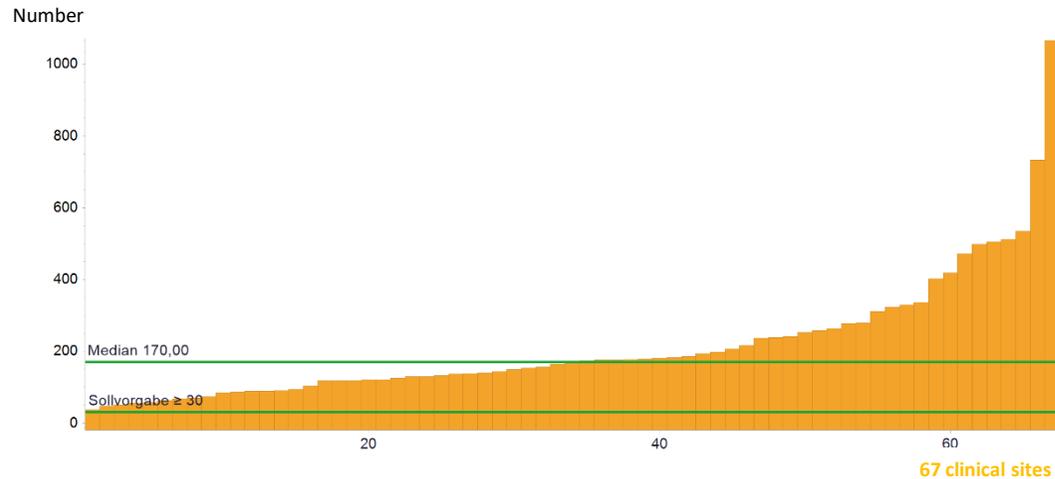
Notes:

This indicator measures the rate of successful sentinel node biopsies and is being implemented very well, as in previous years. All 67 centres are above the target of at least 80%, with 13 of them achieving a rate of 100% and 53 at least 95%.

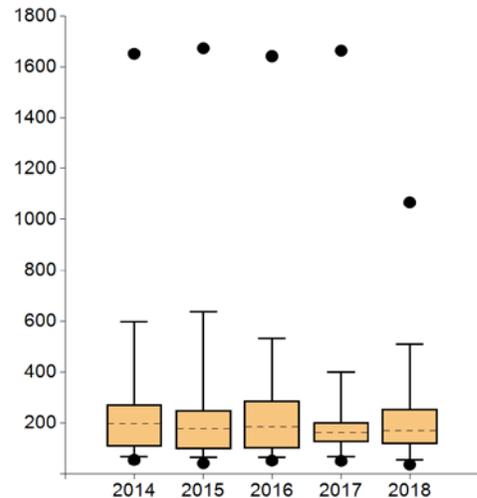
* The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

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

8. Surgical interventions with safety margin defined in the Guideline



Sollvorgabe = target value



	2014	2015	2016	2017	2018
● Max	1,652.00	1,673.00	1,642.00	1,664.00	1,067.00
95. Perentile	597.65	635.85	532.25	401.75	509.90
75. Perentile	273.50	250.50	287.75	204.00	255.00
Median	197.50	176.50	183.50	162.50	170.00
25. Perentile	107.25	98.00	101.50	125.50	118.00
5. Perentile	66.50	64.10	65.60	68.00	55.60
● Min	55.00	42.00	52.00	51.00	37.00

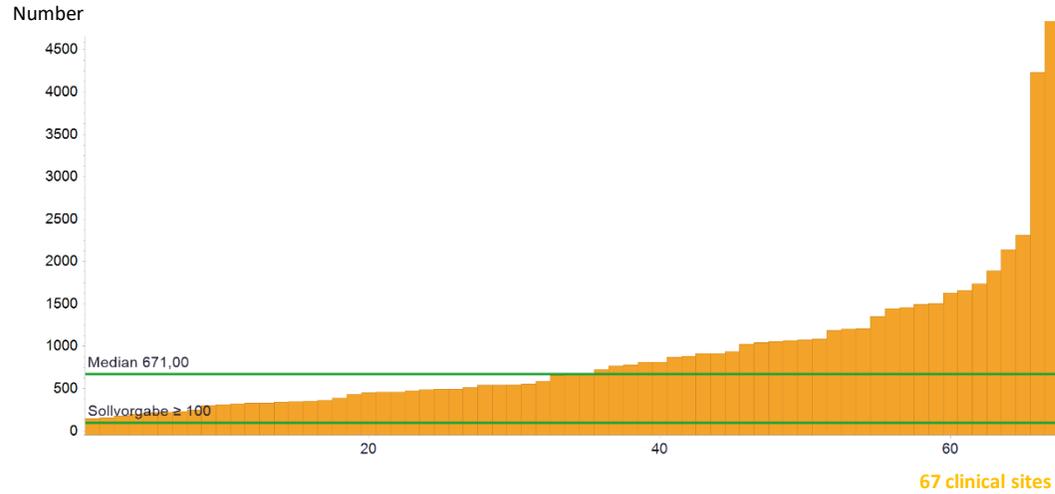
	Indicator definition	All clinical sites 2018		
		Media n	Range	Patient Total
Number	Surgical interventions with safety margin (no interventions with microscopically monitored surgery) (= malignant melanomas, Merkel cell carcinomas, sarcomas), etc.	170	37 – 1,067	14,346
	Target value ≥ 30			

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	67	100.00%

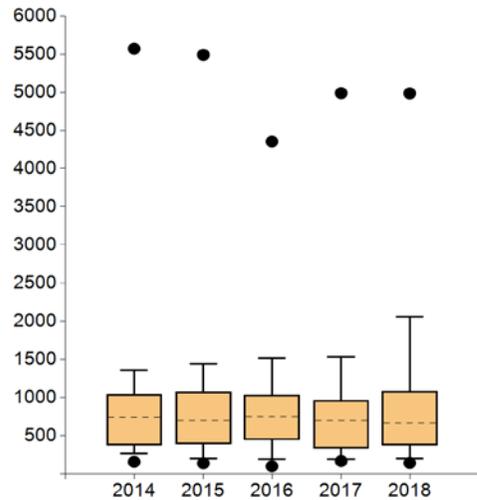
Notes:

As in previous years, all centres meet the target of at least 30 operating theatres with a safety margin in line with guidelines. Due to the fact that the new TNM classification has not yet been used throughout for tumor documentation, the previous year's population was only 26. The number of operations in these centers fell from 6,048 to 5,283 (-12.65%).

9. Surgical interventions with histological margin control



Sollvorgabe = target value



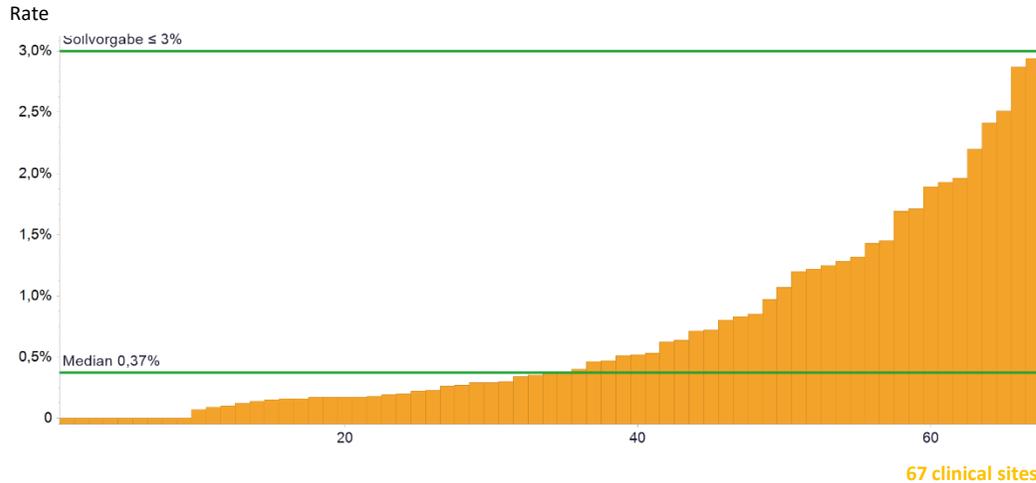
	2014	2015	2016	2017	2018
● Max	5,571.00	5,492.00	4,356.00	4,990.00	4,987.00
95. Perzentil	1,360.50	1,438.90	1,521.70	1,533.50	2,062.10
75. Perzentil	1,040.75	1,070.75	1,031.75	966.75	1,080.00
Median	744.50	705.00	746.00	701.50	671.00
25. Perzentil	373.50	394.50	451.00	340.00	374.00
5. Perzentil	263.65	201.95	191.90	194.00	204.10
● Min	159.00	140.00	102.00	169.00	144.00

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Number	Surgical interventions with histological margin control (no partial biopsies, no interventions with safety margin) (= epithelial tumours)	671	144 – 4,987	60,211
	Target value ≥ 100			

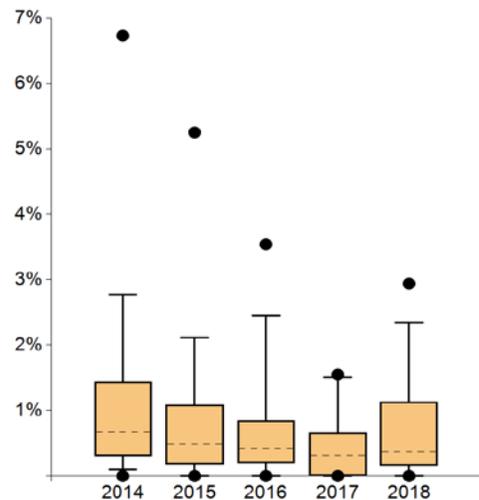
Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	67	100.00%

Notes:
If the basic conditions regarding the population are identical to those of indicator 8, all the centres meet the target, even with a much larger data basis than in the previous year. The centres already listed in the Annual Report 2019 slightly increased the number of surgical interventions with histological marginal control from 21,429 to now 21,792 (+1.69%).

10. Revision surgery after secondary bleeding



Soilvorgabe = target value



	2014	2015	2016	2017	2018
max	6.73%	5.25%	3.54%	1.55%	2.94%
95 th percentile	2.78%	2.11%	2.45%	1.51%	2.35%
75 th percentile	1.44%	1.09%	0.85%	0.66%	1.14%
Median	0.67%	0.49%	0.42%	0.31%	0.37%
25 th percentile	0.30%	0.18%	0.20%	0.00%	0.17%
5 th percentile	0.10%	0.00%	0.00%	0.00%	0.00%
Min	0.00%	0.00%	0.00%	0.00%	0.00%

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Numerator	Revision surgery (5-983) because of intra- or post-operative secondary bleeding (ICD-code: T81.0) for the sum numerators indicators 8 + 9	3*	0 - 39	463
Denominator	Sum numerators Indicators 8 + 9	836*	191 - 5300	74,557
Rate	Target value ≤ 3%	0.37%	0.00% - 2.94%	0.62%**

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	67	100.00%

Notes:

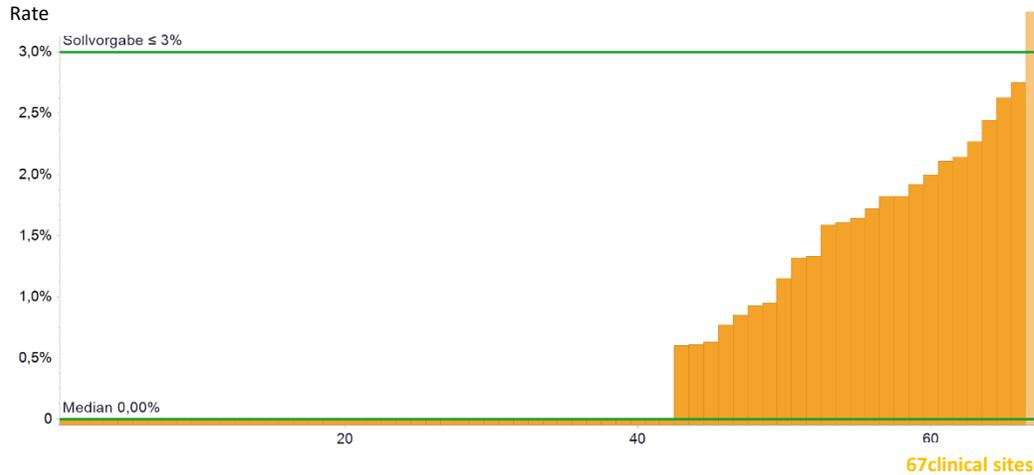
All centers are within the target range of 3% for the rate of post-bleeding revision surgery. Despite the now significantly broader data basis (cf. key figure 1.1), the total quota of centres that already included their data in the annual report in the previous year is at a similar level (0.60%). With a higher maximum value, the median also remains roughly at the previous year's level. This shows that the certified centres continue to implement this ratio very well.

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

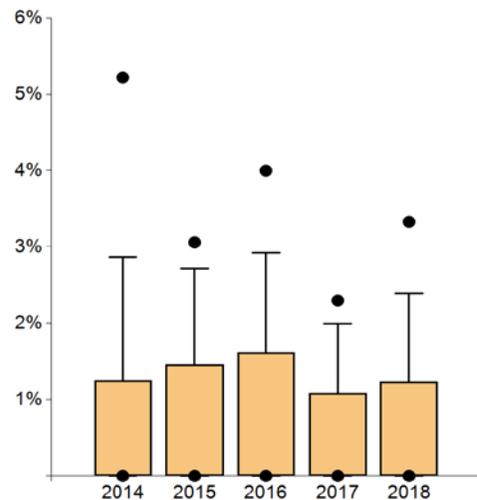
** Percentage of total patients treated in centers according to the numerator.



11. Revision surgery in the case of secondary bleeding after SNB and LND



Sollvorgabe = target value



	2014	2015	2016	2017	2018
max	5.22%	3.06%	4.00%	2.30%	3.33%
95 th percentile	2.87%	2.72%	2.92%	2.00%	2.39%
75 th percentile	1.25%	1.46%	1.62%	1.08%	1.24%
Median	0.00%	0.00%	0.00%	0.00%	0.00%
25 th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
5 th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
Min	0.00%	0.00%	0.00%	0.00%	0.00%

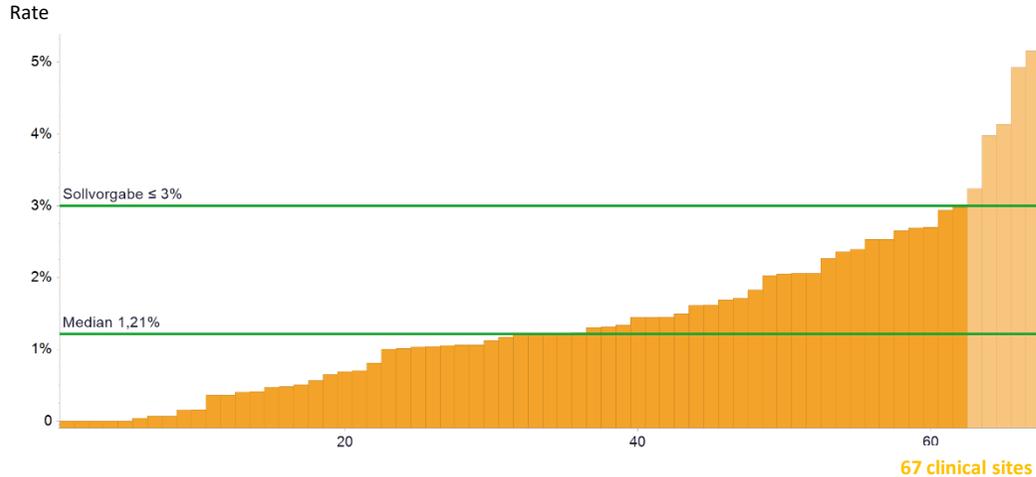
	Indicator definition	All clinical sites 2018		
		Median	Range	Patientes total
Numerator	Revision operations (5-983) due to post-operative post-bleeding (T81.0) according to SNB and therapeutic guidelines LAD in Stad. IIIA, IIIB, IIIC and IIID	0*	0 - 3	16
Denominator	Patients who have received an operation with SNB (= denominator code 7) + patients with therapeutic LAD in the city IIIA, IIIB, IIIC and IIID	84*	16 - 477	2,618
Rate	Target value ≤ 3%	0.00%	0.00% - 2.30%	0.61%**

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	66	98.51%

Notes:
The majority of the centres (42 out of 67) did not have any post-bleeding revision surgery following an SNB or LAD surgery in the key figure year. 1 centre slightly exceeds the target of a maximum of 3%. Here, revision surgery was necessary in 2 of 60 patients, one of whom was treated with NOAK.

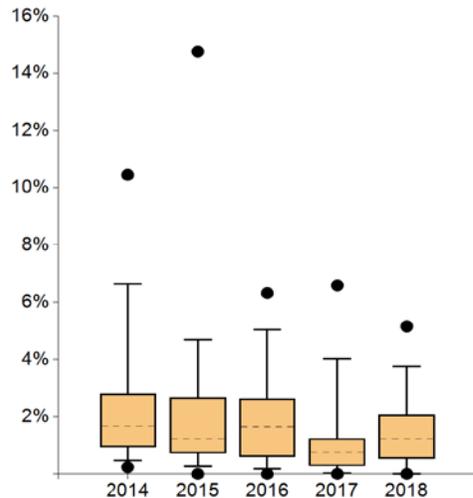
* The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.
** Percentage of total patients treated in centers according to the numerator.

12. Post-surgical wound infections



Sollvorgabe = target value

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Numerator	Post-operative wound infections (ICD-Code: T81.4) for the sum numerators Indicators 8 + 9	9*	0 - 89	1,104
Denominator	Sum numerators Indicators 8 + 9	836*	191 – 5,300	74,557
Rate	Target value ≤ 3%	1.21%	0.00% - 5.16%	1.48%**



	2014	2015	2016	2017	2018
max	10.45%	14.76%	6.32%	6.59%	5.16%
95 th percentile	6.63%	4.70%	5.05%	4.03%	3.76%
75 th percentile	2.80%	2.67%	2.64%	1.24%	2.06%
Median	1.68%	1.24%	1.65%	0.75%	1.21%
25 th percentile	0.93%	0.72%	0.60%	0.29%	0.54%
5 th percentile	0.47%	0.25%	0.17%	0.04%	0.00%
Min	0.24%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	62	92.54%

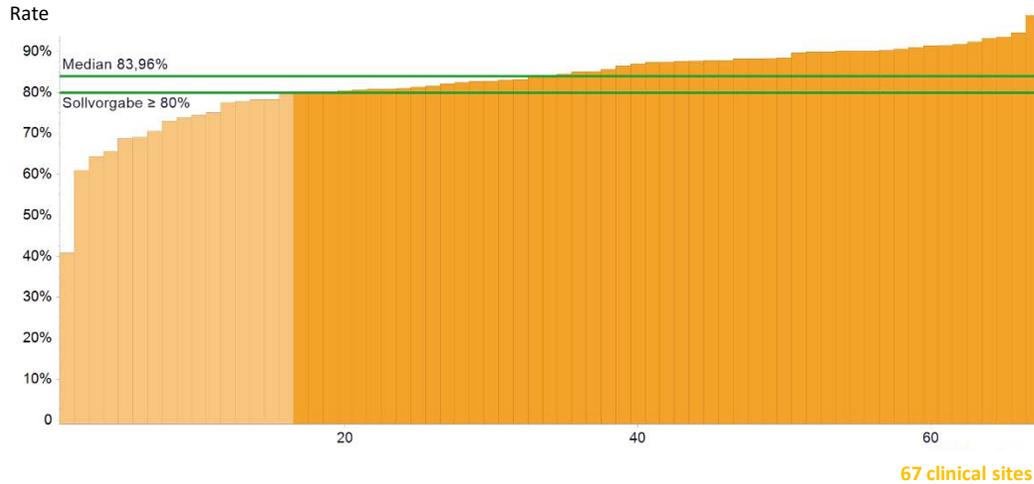
Notes:

Despite a larger number of centres that submitted their data (cf. indicator 1.1), the maximum value has decreased. 5 of the 67 centres exceeded the target of a maximum of 3% postoperative wound infections in the key figure year. These indicated that many of the wound infections covered by code T81.4 were often only mild and local. Nevertheless, some centres made efforts to improve hygiene, for example through action plans or participation in studies on perioperative antibiotic prophylaxis.

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

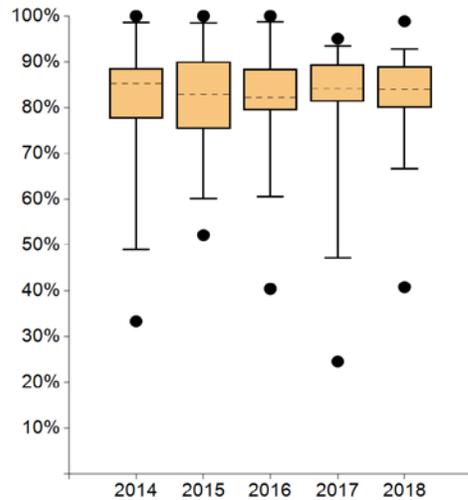
** Percentage of total patients treated in centers according to the numerator.

13. Malignant melanoma: Sentinel node biopsy (Guideline QI)



Sollvorgabe = target value

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Numerator	Primary cases where SNB is carried out	65*	17 - 315	4,655
Denominator	Primary cases with a primary cutaneous melanoma with a tumour density ≥ 1mm and no sign of locoregional or remote metastasis	73*	18 - 361	5,563
Rate	Target value ≥ 80%	83.96%	40.82% - 98.82%	83.68%**



	2014	2015	2016	2017	2018
max	100%	100%	100%	95.06%	98.82%
95 th percentile	98.67%	98.53%	98.69%	93.40%	92.86%
75. percentile	88.55%	89.97%	88.45%	89.36%	89.02%
Median	85.24%	82.90%	82.18%	84.08%	83.96%
25 th percentile	77.54%	75.30%	79.48%	81.25%	80.00%
5 th percentile	49.04%	60.09%	60.49%	47.15%	66.59%
Min	33.33%	52.17%	40.45%	24.56%	40.82%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
67	100.00%	51	76.12%

Notes:

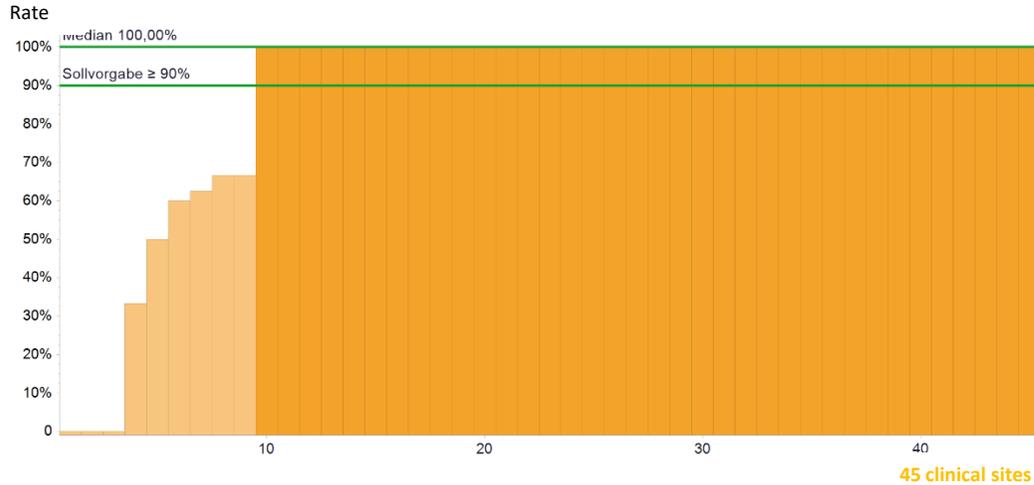
While a good three-quarters of the centres have correctly set the indication for sentinel node biopsy according to the guideline, 16 centres remain below the target of at least 80%. Some of the reasons (rejection by patients due to age/multimorbidity, death before surgery, sentinel node not detectable) were plausible in the audits. In some cases, indications were given and measures such as quality circles were agreed upon to discuss all decisions against an SNB. 1 centre received a deviation due to repeated significant undercutting of this indicator.

* The median for numerator and denominator does not refer to an existing centre, 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.

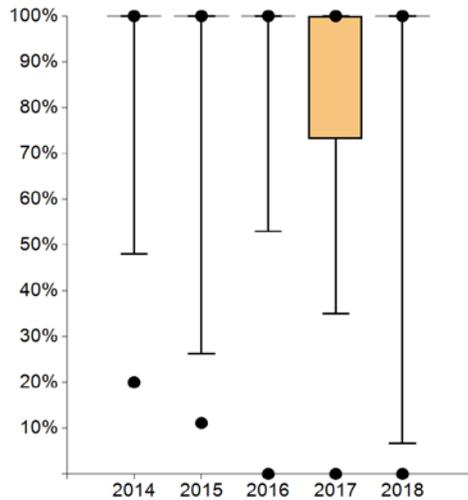


14. Malignant melanoma: Post-operative radiotherapy (Guideline QI)



Sollvorgabe = target value

	Indicator definition	All clinical sites 2018		
		Median	Range	Patients Total
Numerator	Primary cases with radiotherapy with an intended total dose 50-60 Gy with conventional fractionation (5x1,8-2.5 Gy/week)	2*	0 - 8	119
Denominator	Primary cases with malignant melanoma and post-operative radiotherapy of the lymph drainage area	2*	1 - 8	133
Rate	Target value ≥ 90%	100%	0.00% - 100%	89.47%**



	2014	2015	2016	2017	2018
max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25 th percentile	100%	100%	100%	73.22%	100%
5 th percentile	48.13%	26.25%	53.00%	35.00%	6.67%
Min	20.00%	11.11%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
45	67.16%	36	80.00%

Notes:

When interpreting this ratio, the small denominators must be taken into account, which among other things lead to the large scatter of values. All 36 centers that meet the target specification therefore also reach 100%. The remaining 9 centres stated either that they had chosen a lower radiation dose in cases such as lymph node relapse, wound healing disorders in the irradiated area, progress and palliative irradiation. In other cases, irradiation was not used at all, e.g. due to rejection of the patient or septic clinical pictures. This could be checked for plausibility in the audits through individual case examinations.

* The median for numerator and denominator does not refer to an existing centre, 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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Tel.: +49 (030) 322 93 29 0
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Vereinsregister Amtsgericht Charlottenburg,
Vereinsregister-Nr.: VR 27661 B
V.i.S.d.P.: Dr. Johannes Bruns

in cooperation with:
OnkoZert, Neu-Ulm
www.onkozert.de

Version e-A1-de; Status 27.07.2020

ISBN: 978-3-948226-28-2



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