



Annual Report 2022

of the Certified Skin Cancer Centres

Audit year 2021 / Indicator year 2020

Table of Contents

Introduction.....	3
General Information.....	3
Status of the certification system for Skin Cancer Centres 2021.....	5
Clinical sites taken into account	6
Tumour documentation systems in the Centres' clinical sites.....	7
Analysis of basic data.....	8
Analyses of indicators.....	12
Indicator No. 1.1: Epithelial tumours (excl. <i>in situ</i> , incl. <i>inter alia</i> basal cell carcinoma, squamous cell carcinomas).....	12
Indicator No. 1.2: Invasive malignant melanomas (incl. malignant uveal, conjunctival, choroidal and mucosal melanomas).....	13
Indicator No. 1.3: Cutaneous lymphoma and other rare, malignant skin tumours.....	14
Indicator No. 1.4: Patients with stage shift / recurrence.....	15
Indicator No. 2: Melanoma: Discussion of cases (GL QI).....	16
Indicator No. 3: Melanoma: Therapy deviation from recommendation tumour board.....	17
Indicator No. 4: Melanoma: Psycho-oncological care.....	18
Indicator No. 5: Melanoma: Counselling social services (GL QI).....	19
Indicator No. 6: Melanoma: Share of study patients	20
Indicator No. 7: Sentinel node biopsy (SNB).....	21
Indicator No. 8: Surgical interventions with safety margin defined in the Guideline.....	22
Indicator No. 9: Surgical interventions with histological margin control.....	23
Indicator No. 10: Revision surgery after secondary bleeding.....	24
Indicator No. 11: Revision surgery in the case of secondary bleeding after SNB and LAD.....	25
Indicator No. 12: Revision surgery after post-operative wound infections.....	26
Indicator No. 13: Melanoma: Sentinel node biopsy.....	27
Indicator No. 14: Melanoma: Safety margin (1 cm) in the case of radical excision (GL QI).....	28
Indicator No. 15: Melanoma: Safety margin (2 cm) in the case of radical excision (GL QI).....	29
Indicator No. 16: Melanoma: Lymphadenectomy (GL QI).....	30
Indicator No. 17: Melanoma: Mutation analysis for BRAF.....	31
Indicator No. 18: Melanoma: LDH determination (GL QI).....	32
Imprint	33

General information

Indicator No. 14: Melanoma: Safety margin (1 cm) in the case of radical excision (GL QI).....

Indicator No. 15: Melanoma: Safety margin (2 cm) in the case of radical excision (GL QI).....

Indicator No. 16: Melanoma: Lymphadenectomy (GL QI).....

Indicator No. 17: Melanoma: Mutation analysis for BRAF.....

Indicator No. 18: Melanoma: LDH determination (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 German Guideline Programme in Oncology (GGPO). Further information: www.leitlinienprogramm-onkologie.de*

	Kennzahldefinition	Alle Standorte 2019		
		Median	Range	Patienten Gesamt
Zähler	Patienten des Nenners, die in der Tumorkonferenz vorgestellt wurden	29,5*	2 - 290	2869
Nenner	Melanom-Patienten mit Stadienshift/Rezidive und Primärfälle mit extrakutanen Melanomen	30*	2 - 299	3031
Quote	Sollvorgabe ≥ 95%	96,95%	72,09% - 100%	94,66%**

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.

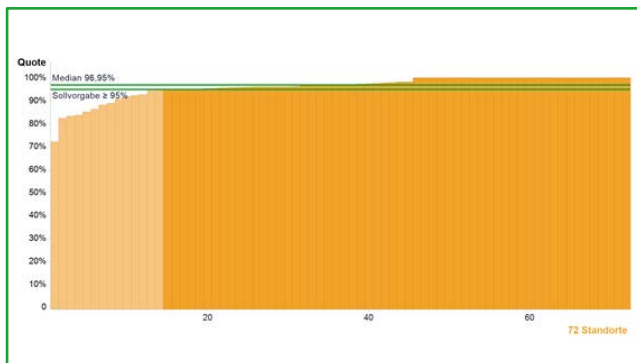


Diagram:

The x-axis indicates the number of Centres, the y-axis gives the values in percent or numbers (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.

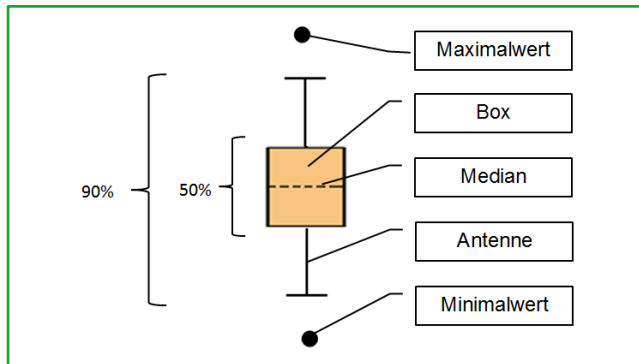
*For further information on the methodological approach see „Development of guideline-based quality indicators“ (https://www.leitlinienprogramm-onkologie.de/fileadmin/user_upload/Downloads/Methodik/QIEP_OL_Version2_english.pdf)

General information

	2015	2016	2017	2018	2019
• Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	94,20%	95,91%	100%	97,17%	97,80%
Median	90,59%	91,95%	92,45%	93,75%	94,12%
25 th percentile	83,33%	87,69%	90,78%	90,91%	92,00%
5 th percentile	46,72%	72,32%	83,96%	78,94%	84,48%
• Min	26,32%	59,26%	76,67%	72,73%	70,21%

Cohort development:

Cohort development in the years **2016, 2017, 2018, 2019 and 2020** 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 2021

	31.12.2021	31.12.2020	31.12.2019	31.12.2018	31.12.2017	31.12.2016
Ongoing Procedures	3	3	3	4	2	5
Certified Centres	75	71	70	63	61	55
Certified Clinical Sites	77	73	70	63	61	55

Clinical sites taken into account

	31.12.2021	31.12.2020	31.12.2019	31.12.2018	31.12.2017	31.12.2016
Clinical sites included in the Annual Report	76	72	67	26	54	52
entspricht	98,70%	98,63%	95,71%	41,27%	88,52%	94,54%
Primary cases total*	14.442	14.665	13.740	5.423	11.584	10.986
Primary cases per clinical site (mean)*	190,0	203,7	205,1	208,6	215	211,3
Primary cases per clinical site (median)*	157,0	181,5	176,0	163,5	179,5	183,5

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

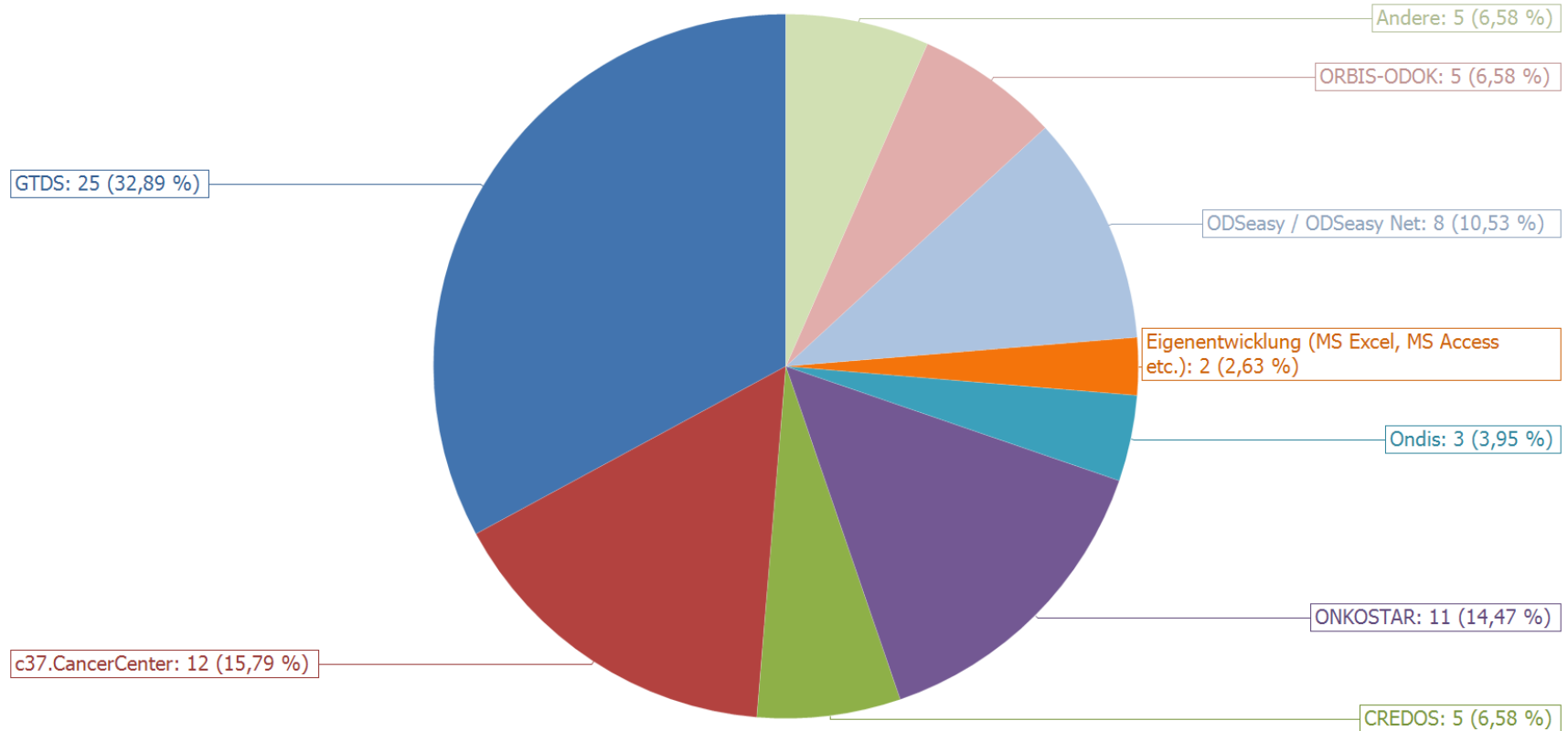
This annual report looks at the skin cancer centres certified in the certification system of the German Cancer Society. The basis for the diagrams in the annual report is the data sheet.

The annual report includes 76 of 77 certified center sites. One site could not be included because a final data sheet was not yet available as of 31.01.2022. A total of 14,588 primary cases of malignant melanoma were treated at all 77 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 2020 and represent the evaluation basis for the audits conducted in 2021.

Tumour documentation systems in the Centre's clinical sites



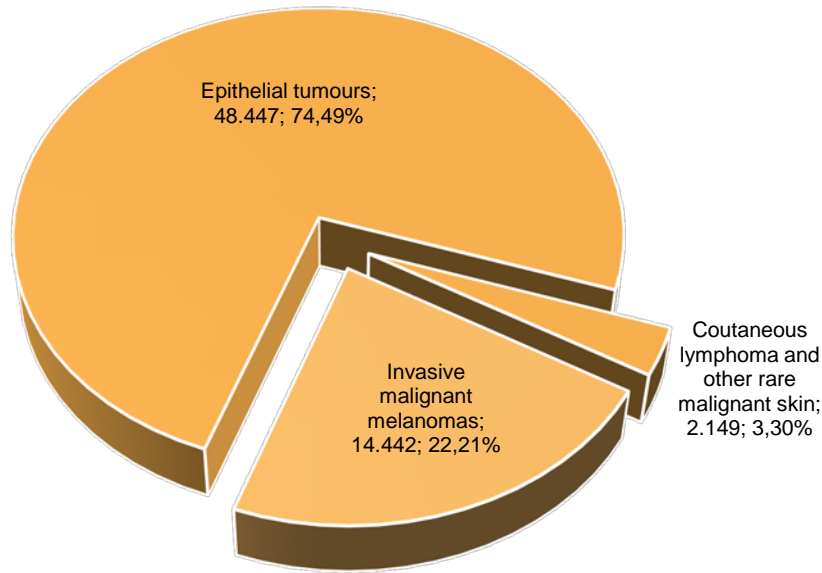
Andere = other

Legende:	
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 use 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.

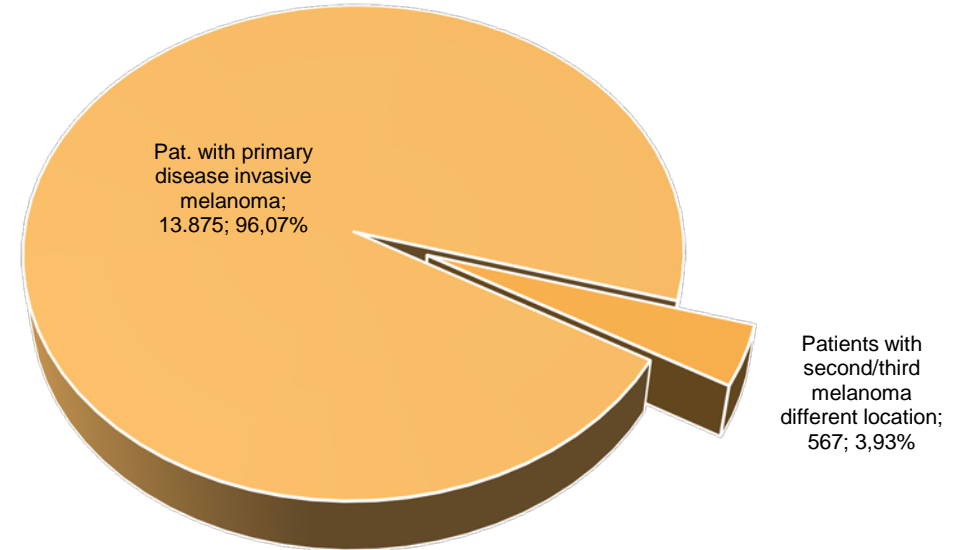
Basic data – Stage distribution primary cases

Distribution primary case patients



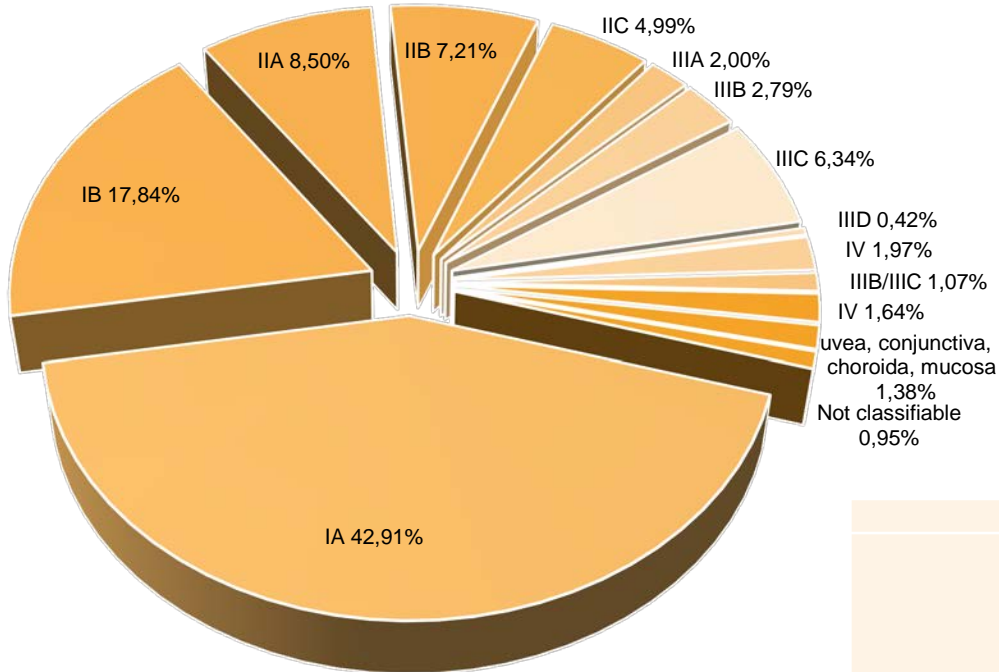
Invasive malignant melanomas	14.442 (22,21%)
Epithelial tumours (excl. <i>in situ</i>)	48.447 (74,49%)
Cutaneous lymphomas and other rare malignant skin tumours (angiosarcoma. Merkel, DFSP. etc.)	2.149 (3,30%)
Total	65.038 (100%)

Distribution primary case patients Invasive melanoma



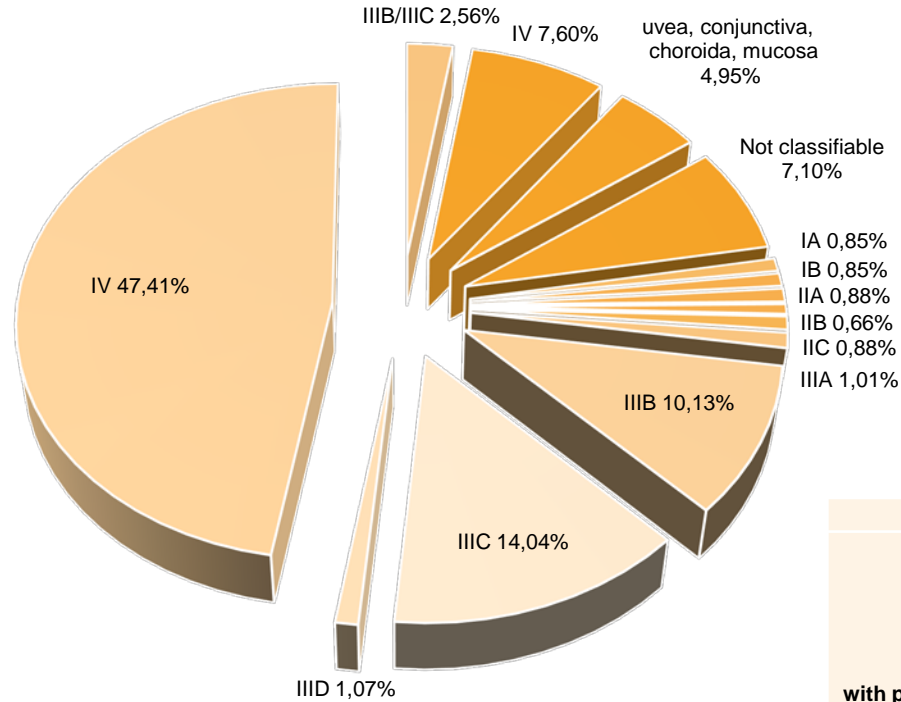
Patients with primary disease invasive melanoma	13.875 (96,07%)
Patients with second/third melanoma different location	567 (3,93%)
Total	14.442 (100%)

Basic data – Stage distribution primary cases invasive melanoma



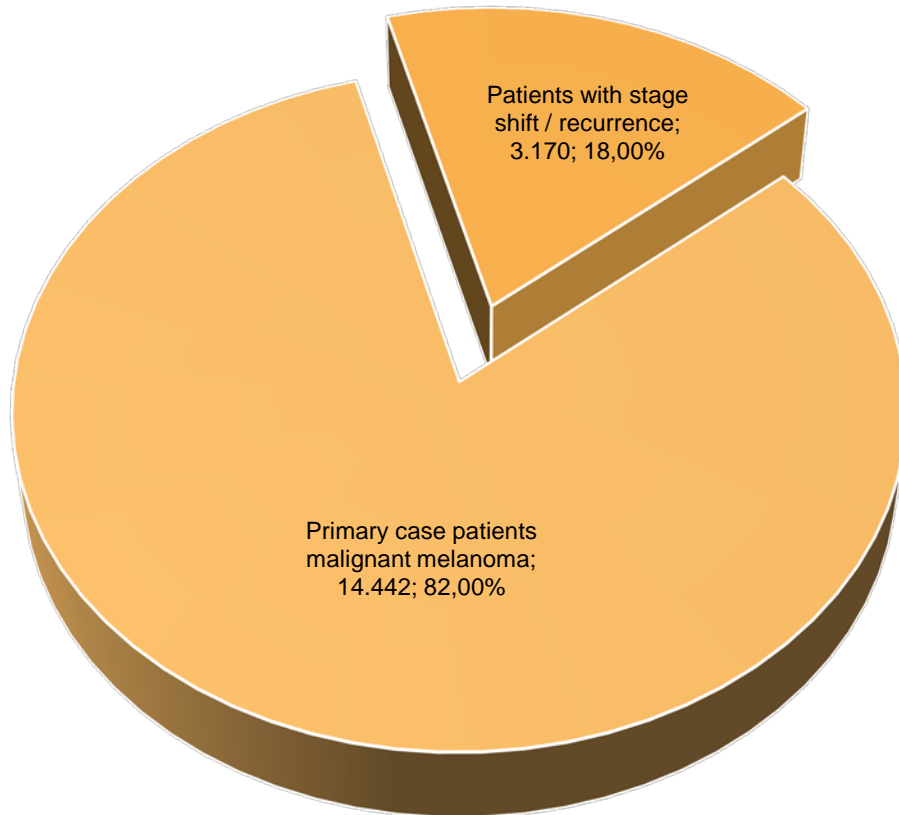
		Audit Year 2021	Audit Year 2020	Audit Year 2019	Audit Year 2018
With primary tumour	IA	6.197 (42,91%)	6.730 (45,89%)	6.036 (43,93%)	2.410 (44,44%)
	IB	2.577 (17,84%)	2.606 (17,77%)	2.718 (19,78%)	1.059 (19,53%)
	IIA	1.227 (8,50%)	1.208 (8,24%)	1.117 (8,13%)	455 (8,39%)
	IIB	1.041 (7,21%)	976 (6,66%)	948 (6,90%)	370 (6,82%)
	IIC	721 (4,99%)	585 (3,99%)	570 (4,15%)	226 (4,17%)
	IIIA	289 (2,00%)	301 (2,05%)	291 (2,12%)	142 (2,62%)
	IIIB	403 (2,79%)	483 (3,29%)	409 (2,98%)	181 (3,34%)
	IIIC	916 (6,34%)	823 (5,61%)	763 (5,55%)	222 (4,09%)
	IIID	60 (0,42%)	55 (0,38%)	52 (0,38%)	24 (0,44%)
	IV	284 (1,97%)	282 (1,92%)	262 (1,91%)	107 (1,97%)
without primary tumour	IIIB/IIIC	154 (1,07%)	117 (0,80%)	113 (0,82%)	43 (0,79%)
	IV	237 (1,64%)	222 (1,51%)	195 (1,42%)	87 (1,60%)
	uvea, conjunctiva, choroida, mucosa	199 (1,38%)	168 (1,15%)	181 (1,32%)	53 (0,98%)
	not classifiable	137 (0,95%)	109 (0,74%)	85 (0,62%)	44 (0,81%)
	Total	14.442 (100%)	14.665 (100%)	13.740 (100%)	5.423 (100%)

Basic data – Stage distribution stage shift / recurrence in melanoma



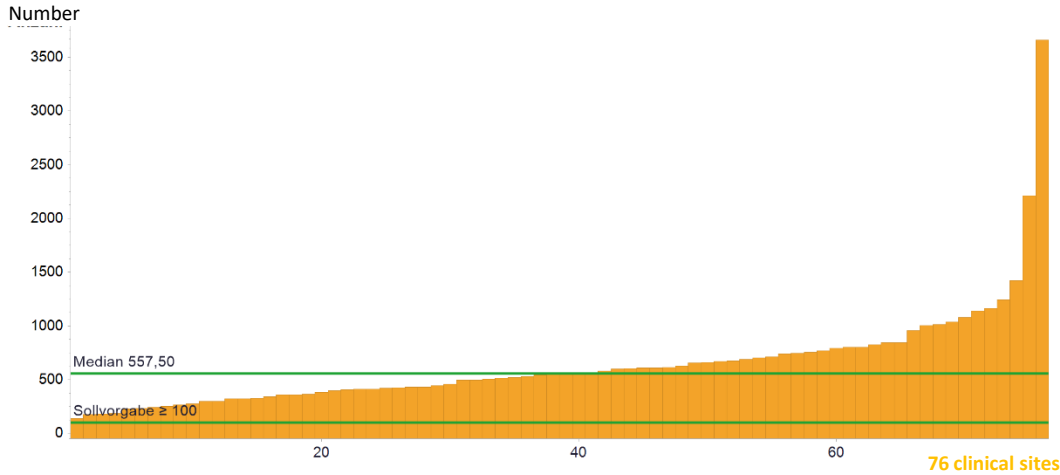
		Audit Year 2021	Audit Year 2020	Audit Year 2019	Audit Year 2018
with primary tumour	IA	27 (0,85%)	33 (1,15%)	19 (0,67%)	9 (0,94%)
	IB	27 (0,85%)	25 (0,87%)	13 (0,46%)	7 (0,73%)
	IIA	28 (0,88%)	17 (0,59%)	18 (0,64%)	8 (0,83%)
	IIB	21 (0,66%)	30 (1,05%)	21 (0,74%)	10 (1,04%)
	IIC	28 (0,88%)	28 (0,98%)	18 (0,64%)	4 (0,42%)
	IIIA	32 (1,01%)	52 (1,82%)	43 (1,52%)	30 (3,13%)
	IIIB	321 (10,13%)	281 (9,81%)	220 (7,78%)	100 (10,43%)
	IIIC	445 (14,04%)	392 (13,69%)	318 (11,24%)	123 (12,83%)
	IIID	34 (1,07%)	41 (1,43%)	17 (0,60%)	13 (1,36%)
	IV	1.503 (47,41%)	1.216 (42,47%)	1.574 (55,64%)	533 (55,58%)
without primary tumour	IIIB/IIIC	81 (2,56%)	99 (3,46%)	127 (4,49%)	67 (6,99%)
	IV	241 (7,60%)	386 (13,48%)	171 (6,04%)	48 (5,01%)
	uvea, conjunctiva, choroida, mucosa	157 (4,95%)	122 (4,26%)	110 (3,89%)	4 (0,42%)
	not classifiable	225 (7,10%)	141 (4,92%)	160 (5,66%)	3 (0,31%)
	Total	3.170 (100%)	2.863 (100%)	2.829 (100%)	959 (100%)

Basic data – Centre patients melanoma



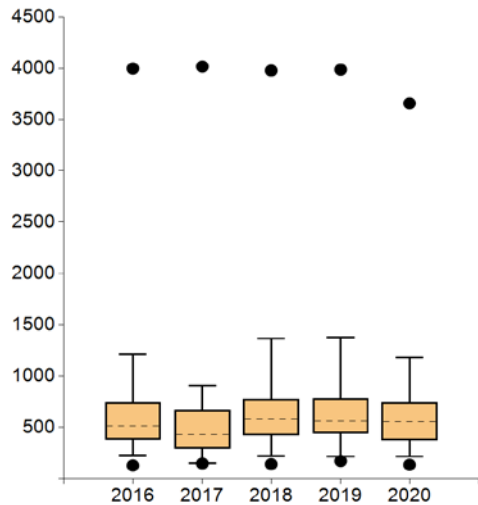
Primary case patients malignant melanoma	Patients with stage shift / recurrence	Center patients
14.442 (82,00%)	3.170 (18,00%)	17.612 (100%)

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



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Number	Primary cases (Def. see 1.1.3)	557,5	136 - 3658	48447
	Target value ≥ 100			

Sollvorgabe = target value



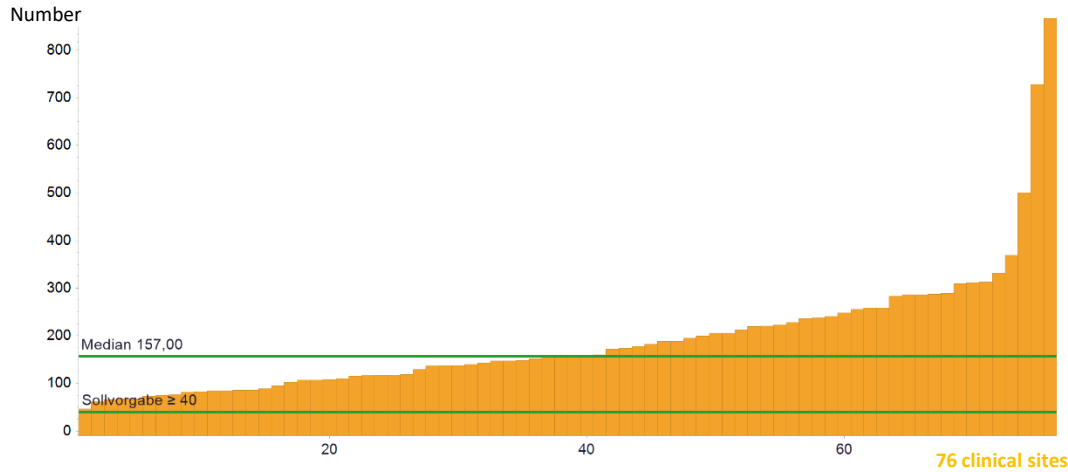
	2016	2017	2018	2019	2020
Max	3998,00	4017,00	3978,00	3987,00	3658,00
95 th percentile	1207,95	908,75	1367,30	1378,85	1182,00
75 th percentile	746,25	671,75	778,50	783,50	745,50
Median	512,00	432,00	577,00	564,00	557,50
25 th percentile	383,00	296,75	425,50	443,00	377,75
5 th percentile	228,35	153,75	223,40	216,45	217,50
Min	129,00	148,00	142,00	173,00	136,00

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

Comments:

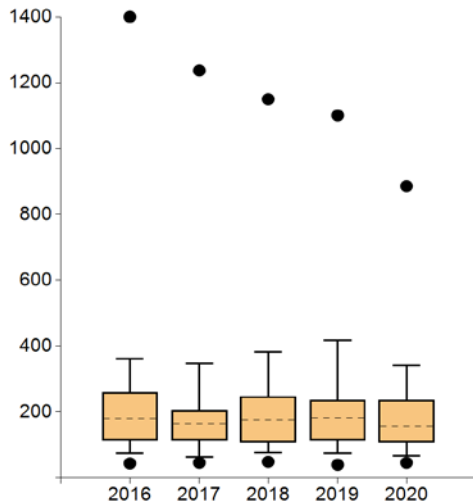
Although 4 more centres were included in the evaluation than in the previous year, the number of primary cases with epithelial tumours decreased by 2.63%. This is probably related to the Corona pandemic. The target of at least 100 primary cases with epithelial tumours continues to be achieved by all centres without any problems.

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



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Number	Primary cases (Def. see 1.1.3)	157	46 - 886	14442
	Target value ≥ 40			

Sollvorgabe = target value



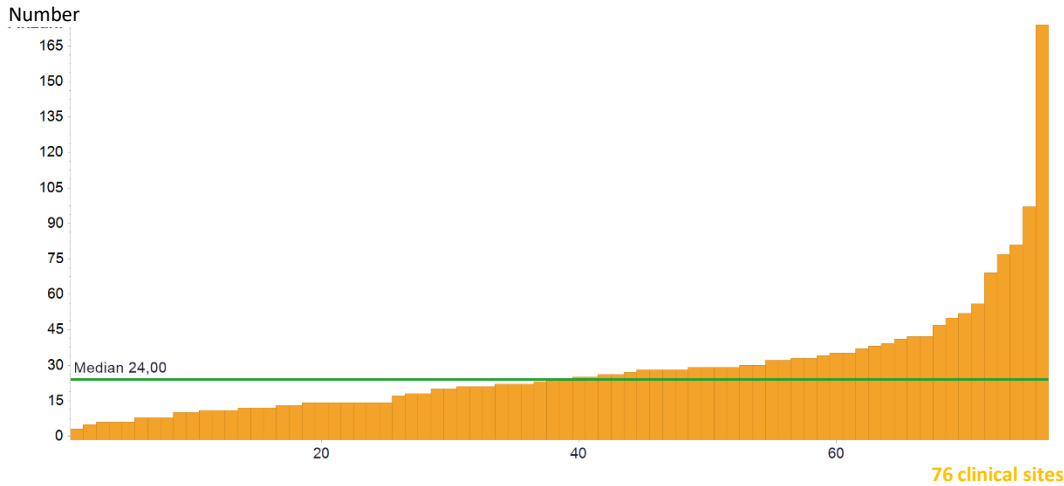
	2016	2017	2018	2019	2020
Max	1400,00	1237,00	1150,00	1101,00	886,00
95 th percentile	361,90	346,25	381,40	416,70	341,25
75 th percentile	259,75	204,25	246,50	236,00	236,25
Median	179,50	163,50	176,00	181,50	157,00
25 th percentile	112,75	112,75	108,00	113,75	107,75
5 th percentile	74,30	63,75	77,00	74,75	68,00
Min	44,00	46,00	49,00	40,00	46,00

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

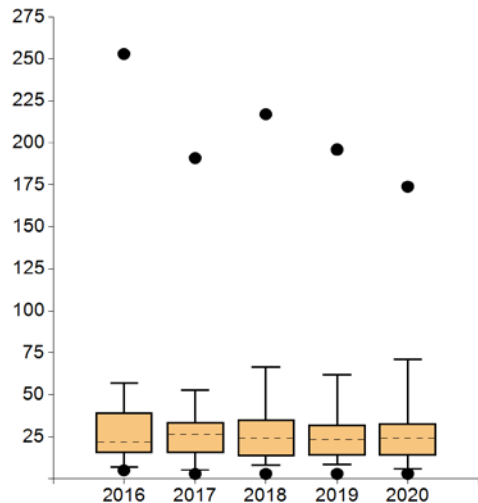
Comments:

The median has decreased significantly (probably due to corona). The total primary case number of melanomas has decreased by 1.52% at 4 additional centres and thus less strongly than for epithelial tumours (cf. indicator 1.1). The minimum quantity of 40 is also achieved by all skin cancer centres for this indicator.

1.3. Cutaneous lymphoma and other rare, malignant skin tumours (angiosarcoma, Merkel cell carcinoma, etc.)



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Number	Primary cases (Def. see 1.1.3)	24	3 - 174	2149
	No target value			



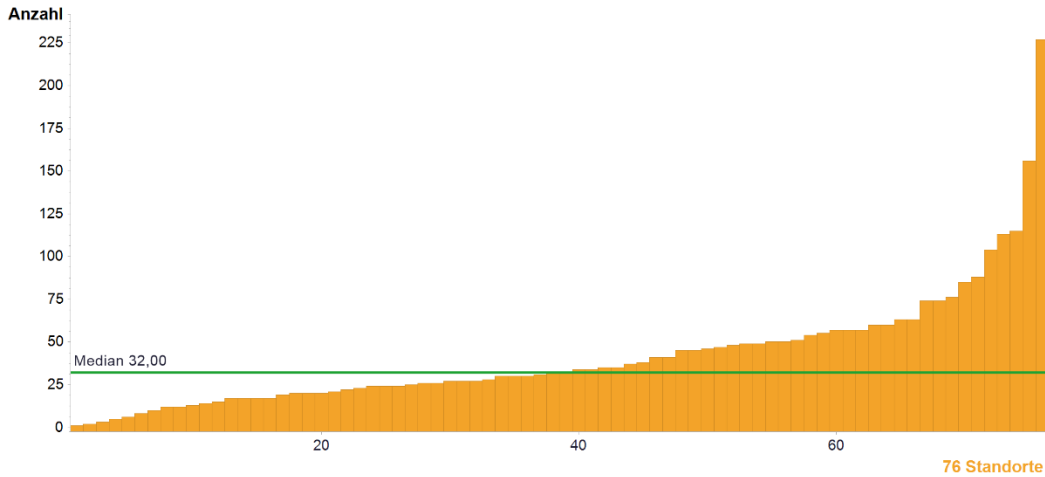
	2016	2017	2018	2019	2020
Max	253,00	191,00	217,00	196,00	174,00
95 th percentile	56,75	53,00	66,40	62,00	71,00
75 th percentile	39,50	33,75	35,00	32,25	33,00
Median	22,00	26,50	24,00	23,50	24,00
25 th percentile	15,25	15,50	13,50	14,00	14,00
5 th percentile	7,00	5,25	8,30	8,55	6,00
Min	5,00	3,00	3,00	3,00	3,00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	----	----

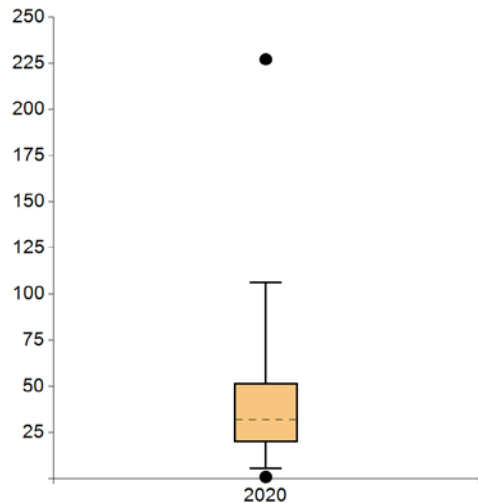
Comments:

No target exists for the rare skin tumours. Despite the corona pandemic, the median and the total number of primary cases treated in the centres increased slightly (+3.22%). The development thus shows an opposite trend compared to the epithelial tumours or melanomas. Patient reluctance to stay in hospital or restructuring in the centres may have played a lesser role for these tumours.

1.4. Patients with stage shift / recurrence



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Number	Pateints with stage shift / recurrence	32	1 - 227	3170
	No target value			



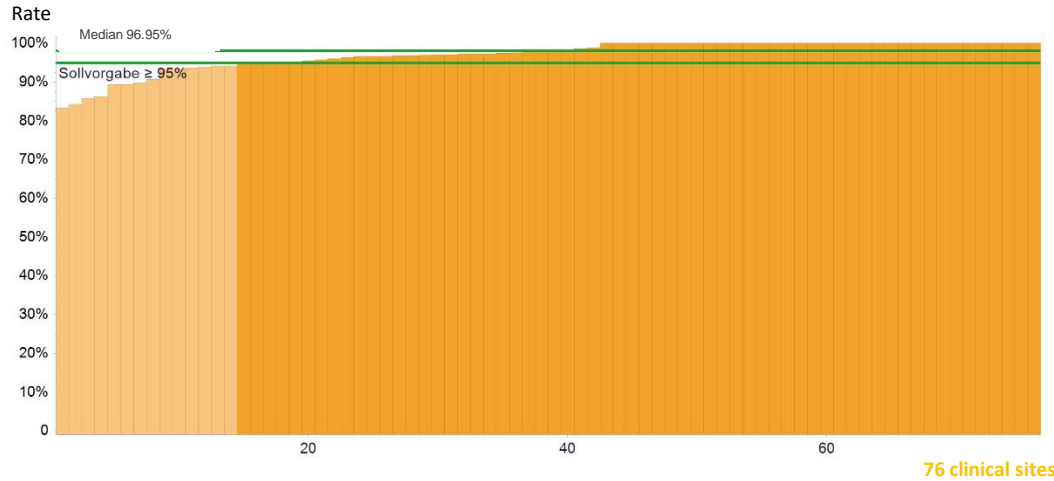
	2016	2017	2018	2019	2020
● Max	----	----	----	----	227,00
95 th percentile	----	----	----	----	106,25
75 th percentile	----	----	----	----	51,75
Median	----	----	----	----	32,00
25 th percentile	----	----	----	----	20,00
5 th percentile	----	----	----	----	5,75
● Min	----	----	----	----	1,00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	----	----

Comments:

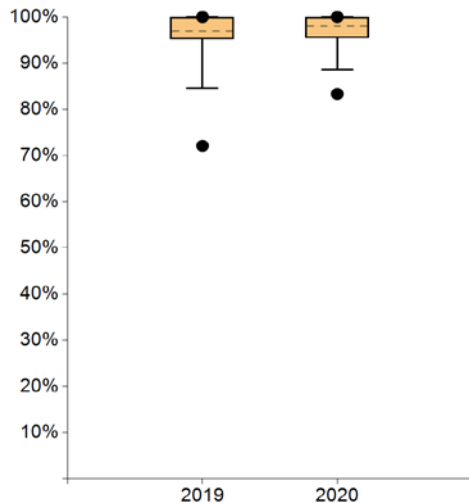
In the indicator year 2020, the number of melanoma patients with stage shift or recurrence was documented for the first time. On average, each centre treated 32 corresponding patients, whereby the range is very large.

2. Melanoma: Discussion of cases (GL Melanoma QI)



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Patients who were presented in the tumour board	33*	1 - 231	3255
Denominator	Patients with stage shift / recurrence and primary cases with extracutaneous melanoma	34*	1 - 239	3369
Rate	Target value ≥ 95%	98,00%	83,33% - 100%	96,62%**

Sollvorgabe = target value



	2016	2017	2018	2019	2020
● Max	----	----	----	100%	100%
95 th percentile	----	----	----	100%	100%
75 th percentile	----	----	----	100%	100%
Median	----	----	----	96,95%	98,00%
25 th percentile	----	----	----	95,24%	95,40%
5 th percentile	----	----	----	84,56%	88,52%
● Min	----	----	----	72,09%	83,33%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	62	81,58%

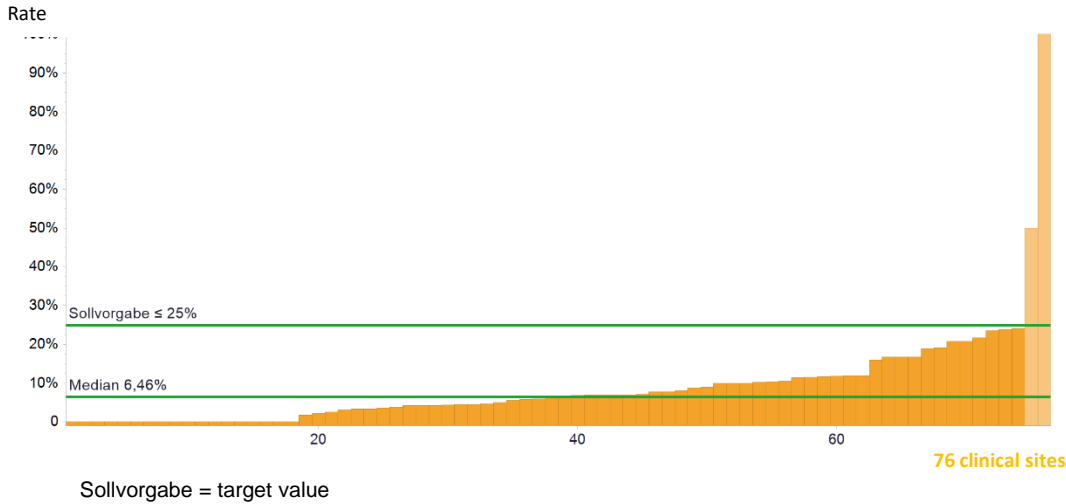
Comments:

The tumour boards presentation rate has improved slightly. As in the previous year, 14 centres failed to meet the target, of which, however, only 3 were also conspicuous in the previous year. In most cases, omissions in individual cases (6 mentions) were responsible for the shortfall. Sometimes the underlying processes were not yet established (4x) or patients had already died early (3x). The centres reacted with training and quality circles and were encouraged by the auditors to consistently present the denominator's patients, if necessary.

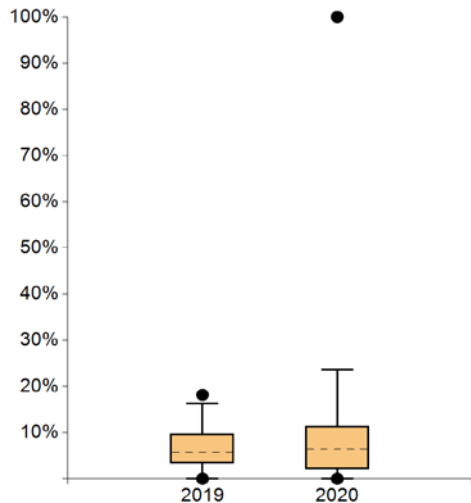
* The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

** Percentage of total patients treated in centres according to the indicator.

3. Melanoma: Therapy deviation from recommendation tumour board



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Patients of the denominator in whom a treatment deviation was made	2*	0 - 50	268
Denominator	Patients with stage shift / recurrence and primary cases with extracutaneous melanoma which were presented in the tumour board (= numerator Indicator 2)	33*	1 - 231	3255
Rate	Target value ≤ 25%	6,46%	0,00% - 100%	8,23%**



	2016	2017	2018	2019	2020
Max	----	----	----	18,18%	100%
95 th percentile	----	----	----	16,30%	23,60%
75 th percentile	----	----	----	9,69%	11,43%
Median	----	----	----	5,75%	6,46%
25 th percentile	----	----	----	3,38%	2,15%
5 th percentile	----	----	----	0,00%	0,00%
Min	----	----	----	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	74	97,37%

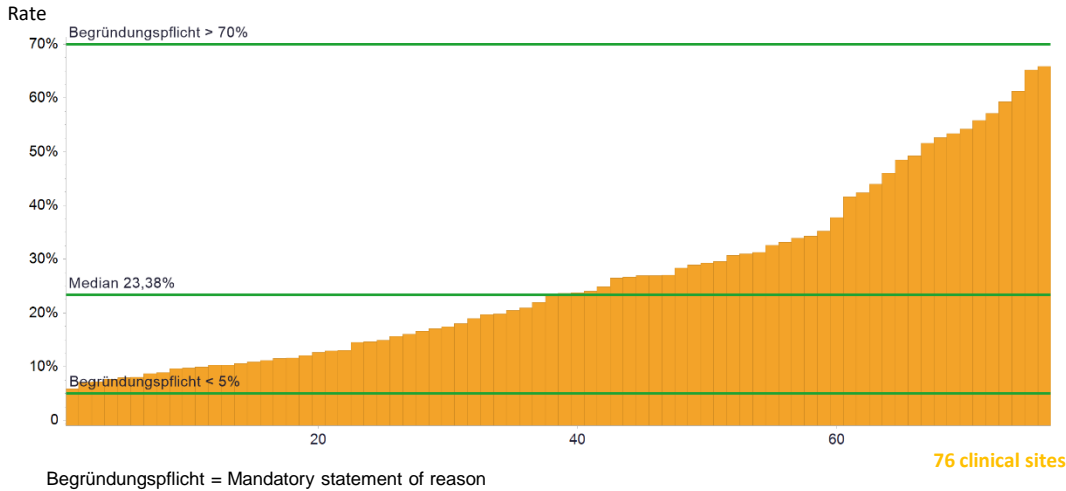
Comments:

While all centres met the target in the previous year, in 2020 it was missed by 2 centres. The overall rate and the median have increased slightly. The centre with a rate of 100% had only 1 patient in the denominator. The two centres above the target justified their rates by the fact that patients refused the recommended therapies.

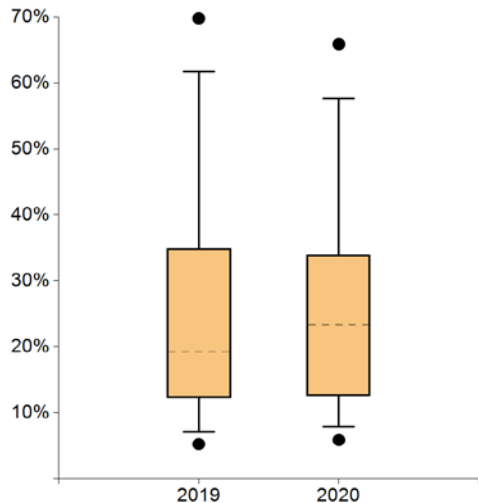
* The indication of the median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

** Percentage of total patients treated in centres according to the indicator.

4. Melanoma: Psycho-oncological care



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Patients that received psycho-oncological counselling in an inpatient or outpatient setting (session ≥ 25 Min)	39*	5 - 234	4328
Denominator	Primary cases (= Indicator 1.2) + patients with stage shift / recurrence (=basic data R34)	193*	49 - 999	17612
Rate	Mandatory statement of reason*** <5% and >70%	23,38%	5,88% - 65,87%	24,57%**



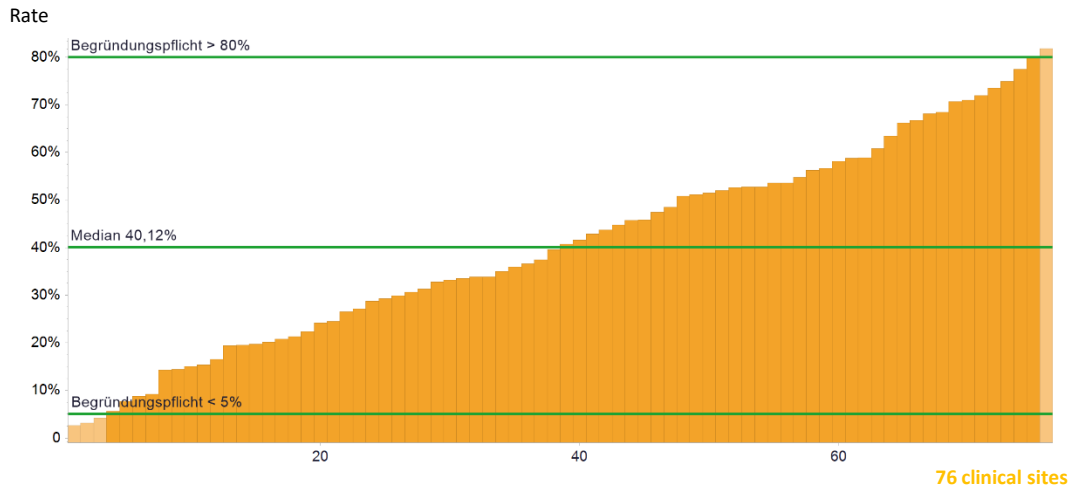
	2016	2017	2018	2019	2020
Max	----	----	----	69,77%	65,87%
95 th percentile	----	----	----	61,73%	57,68%
75 th percentile	----	----	----	34,83%	33,97%
Median	----	----	----	19,20%	23,38%
25 th percentile	----	----	----	12,26%	12,50%
5 th percentile	----	----	----	7,06%	7,87%
Min	----	----	----	5,26%	5,88%

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

Comments:
 Median and overall rates of psycho-oncological care have increased. This development is remarkable in view of the pandemic conditions. All centres are within the plausibility corridor and have thus achieved a care rate of at least 5%.

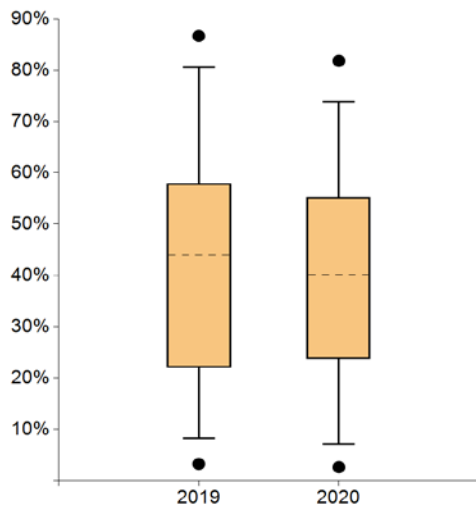
* The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.
 ** Percentage of total patients treated in centres according to the indicator.
 *** In the case of values outside the plausibility limit(s), the centres are obliged to provide justification.

5. Melanoma: Counselling social services (GL Melanoma QI)



Begründungspflicht = Mandatory statement for reason

	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Patients which received social services counselling in an inpatient or outpatient setting	77*	2 - 427	6921
Denominator	Primary cases (= Indicator 1.2) + patients with stage shift / recurrence (=basic data R34)	193*	49 - 999	17612
Rate	Mandatory statement for reason*** <5% and >80%	40,12%	2,65% - 81,82%	39,30%**



	2016	2017	2018	2019	2020
Max	----	----	----	86,67%	81,82%
95 th percentile	----	----	----	80,49%	73,83%
75 th percentile	----	----	----	57,91%	55,12%
Median	----	----	----	44,02%	40,12%
25 th percentile	----	----	----	22,04%	23,68%
5 th percentile	----	----	----	8,26%	7,18%
Min	----	----	----	3,28%	2,65%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	72	94,74%

Comments:

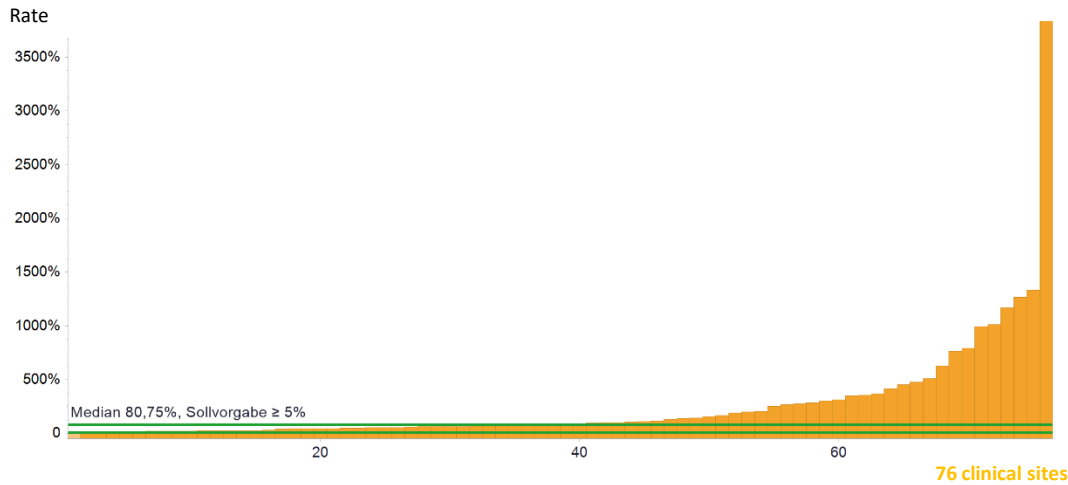
With the overall rate stable, the median fell slightly. Of the 4 centers outside the plausibility corridor, one was above 80% and 3 (previous year: 1) below 5%. The latter were located in countries outside of Germany, where other responsibilities and legal entitlements apply than in Germany. Nevertheless, the centers concerned made efforts to expand social counselling by introducing psychosocial working groups or hiring staff.

* 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 centres according to the indicator.

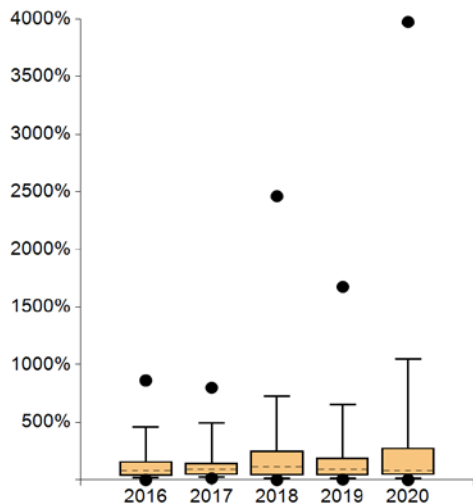
*** In the case of values outside the plausibility limit(s), the centres are obliged to provide justification.

6. Melanoma: Share of study patients



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Patients with a melanoma who were included in a study with an ethical vote	22*	0 - 993	5180
Denomintor	Primary cases with a melanoma stages III - IV	27*	6 - 154	2433
Rate	Target value ≥ 5%	80,75%	0,00% - 3.972,00%	212,91%**

Sollvorgabe = target value



	2016	2017	2018	2019	2020
Max	862,50%	800,00%	2.460,00%	1.674,60%	3.972,00%
95 th percentile	455,12%	491,67%	728,80%	655,00%	1.051,04%
75 th percentile	163,24%	146,43%	249,22%	192,94%	277,52%
Median	83,55%	93,90%	112,00%	89,68%	80,75%
25 th percentile	35,12%	44,10%	37,27%	36,71%	44,23%
5 th percentile	15,27%	22,70%	14,47%	12,46%	10,70%
Min	0,00%	15,38%	0,00%	4,76%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	75	98,68%

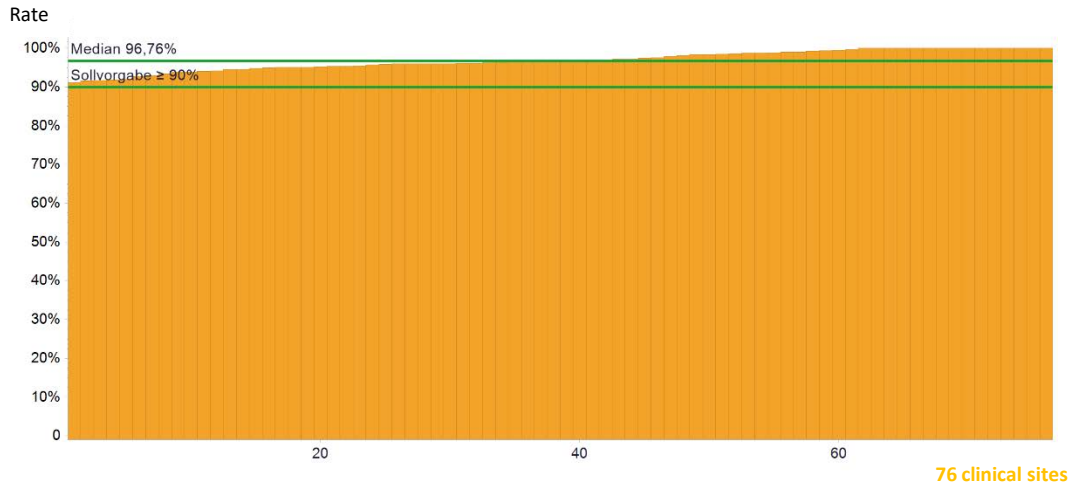
Comments:

With a lower median, both the overall study rate and the maximum value have increased significantly. This is due to the very high quotas of individual centres. Due to the future exclusion of pure biobank collections, the maximum value will probably decrease in the future. As in the previous year, one centre failed to meet the target, although the two years involved different centres. The centre was unable to enroll study patients at the audit date, but initiated its own study or cooperated with another clinic so that patients could already be recruited by January 2021.

* 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.

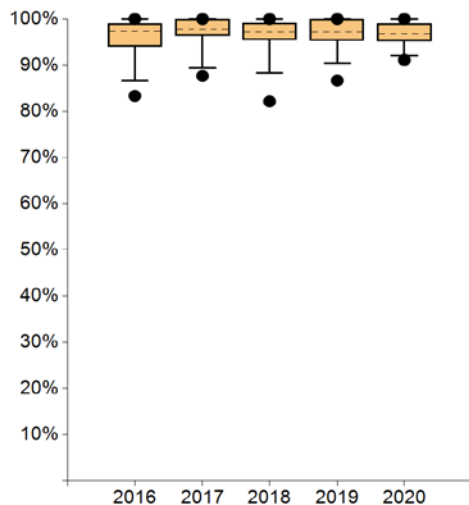
** Percentage of total patients treated in centres according to the indicator.

7. Sentinel node biopsy (SNB)



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	SNB surgeries with sentinel lymph node confirmed intraoperatively	66*	23 - 311	6660
Denomintor	SNB surgeries (multiple mentioning per patient possible)	68,5*	25 - 312	6862
Rate	Target value ≥ 90%	96,76%	91,11% - 100%	97,06%**

Sollvorgabe = target value



	2016	2017	2018	2019	2020
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	98,99%	100%	99,18%	100%	99,08%
Median	97,30%	97,66%	97,22%	97,22%	96,76%
25 th percentile	93,95%	96,42%	95,40%	95,32%	95,17%
5 th percentile	86,59%	89,34%	88,25%	90,44%	91,96%
● Min	83,33%	87,65%	82,14%	86,67%	91,11%

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

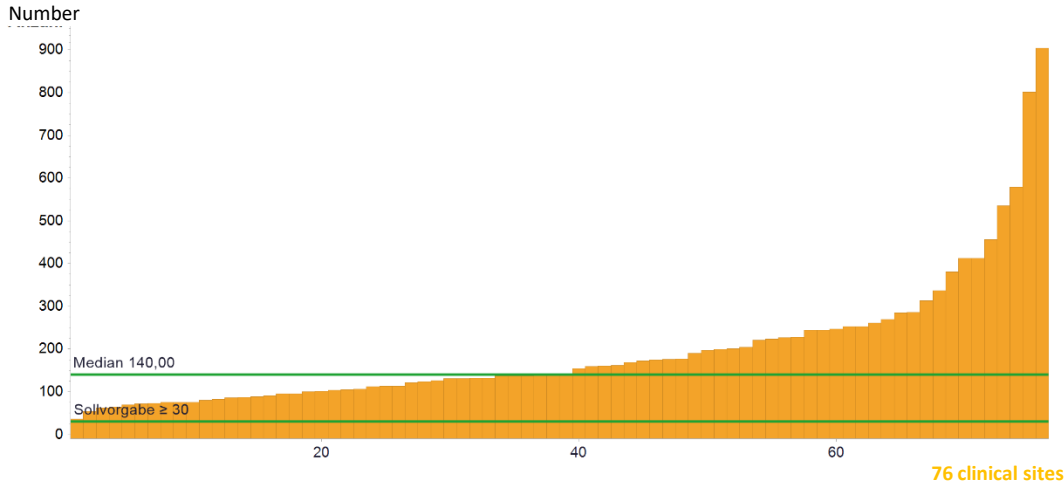
Comments:

While 2 centres failed to meet the target in the previous year, all centres were able to detect the sentinel lymph node intraoperatively in at least 90% of cases of SNB operations in the 2020 indicator year. With a slightly lower median, the lower percentiles in particular have improved. 15 centres achieved a rate of 100%.

* 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.

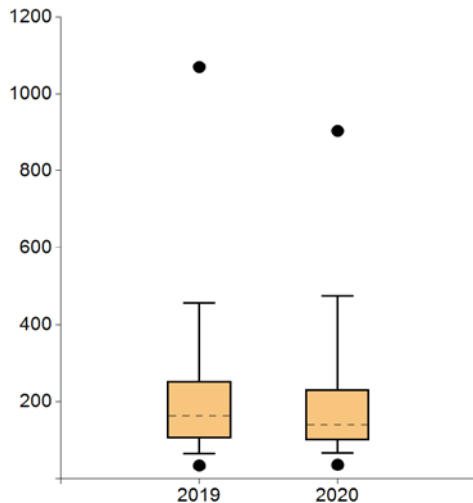
** Percentage of total patients treated in centres according to the indicator.

8. Surgical interventions with safety margins defined in the guideline



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Number	Surgical interventions with safety margins in primary cases (no interventions with micrographically controlled surgery) (= malignant melanomas, Merkel cell carcinomas, sarcomas and other rare malignant skin tumours)	140	36 - 904	14798
	Target value ≥ 30			

Sollvorgabe = target value



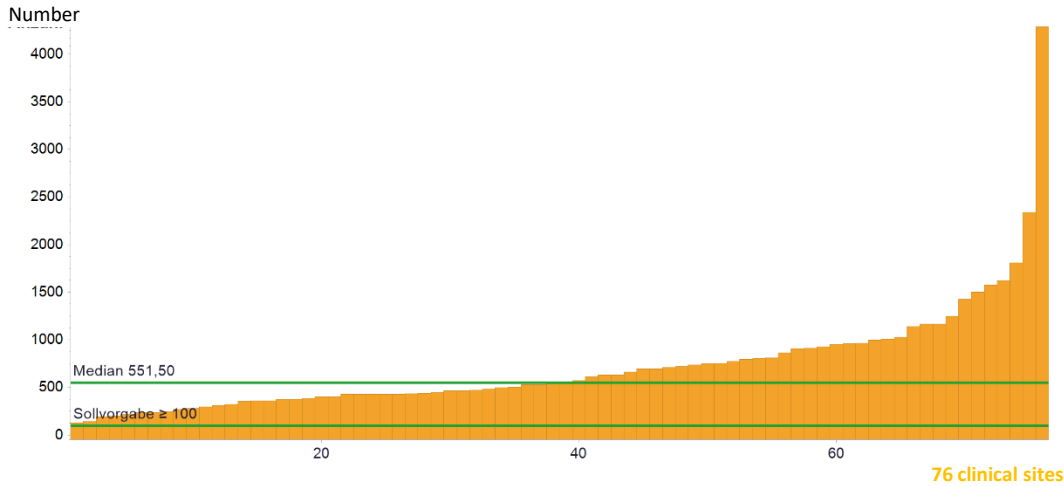
	2016	2017	2018	2019	2020
● Max	----	----	----	1070,00	904,00
95 th percentile	----	----	----	455,90	475,75
75 th percentile	----	----	----	253,50	232,00
Median	----	----	----	164,50	140,00
25 th percentile	----	----	----	106,00	100,75
5 th percentile	----	----	----	65,30	67,75
● Min	----	----	----	34,00	36,00

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

Comments:

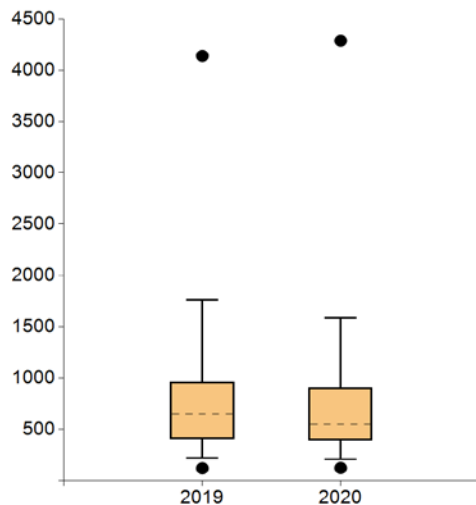
As in the previous year, all centres achieved the target of at least 30 operations with a safety margin according to the guideline for melanomas or rare skin tumours. The total number of operations has remained almost constant (+12 operations) with 4 additional centres included in the data evaluation. The decreased median is - just like the case number development for melanomas - probably due to the Corona pandemic.

9. Surgical interventions with histological margin control



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Number	Surgical interventions with histological margin control in primary cases (no sample biopsies, no interventions with safety margin) (= epithelial tumours)	551,5	125 - 4288	54683
	Target value ≥ 100			

Sollvorgabe = target value



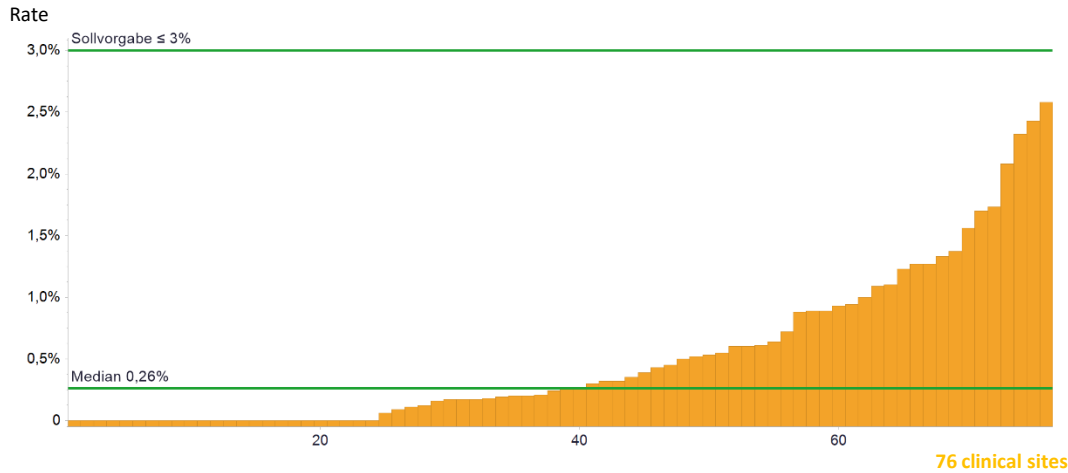
	2016	2017	2018	2019	2020
Max	----	----	----	4140,00	4288,00
95 th percentile	----	----	----	1766,55	1586,00
75 th percentile	----	----	----	963,00	906,50
Median	----	----	----	653,50	551,50
25 th percentile	----	----	----	408,25	395,25
5 th percentile	----	----	----	223,70	212,25
Min	----	----	----	122,00	125,00

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

Comments:

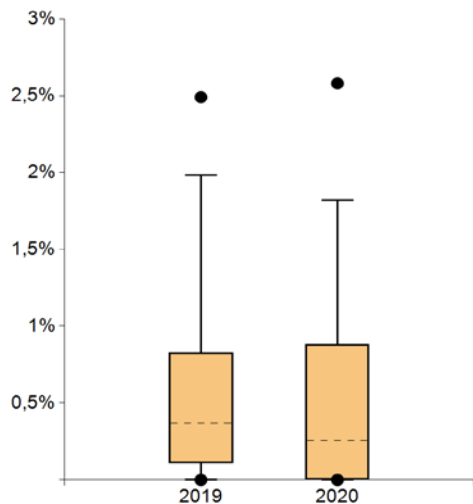
Parallel to the stronger decline in the total number of primary cases of epithelial tumours compared to melanomas, the number of operations with histological marginal control also declined significantly (-2,411 operations or -4.22%). Nevertheless, all centres achieved the target of at least 100 procedures without any problems. The median has decreased significantly to 551.5.

10. Revision surgery after secondary bleeding



Sollvorgabe = target value

	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Revision surgery (OPS: 5-983) because of intra- or post-operative secondary bleeding (T81.0) after surgeries of the denominator	2*	0 - 54	388
Denominator	Sum numerators Indicators 8 + 9	773*	176 - 5192	69481
Rate	Target value ≤ 3%	0,26%	0,00% - 2,58%	0,56%**



	2016	2017	2018	2019	2020
Max	----	----	----	2,49%	2,58%
95 th percentile	----	----	----	1,98%	1,82%
75 th percentile	----	----	----	0,83%	0,88%
Median	----	----	----	0,37%	0,26%
25 th percentile	----	----	----	0,11%	0,00%
5 th percentile	----	----	----	0,00%	0,00%
Min	----	----	----	0,00%	0,00%

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

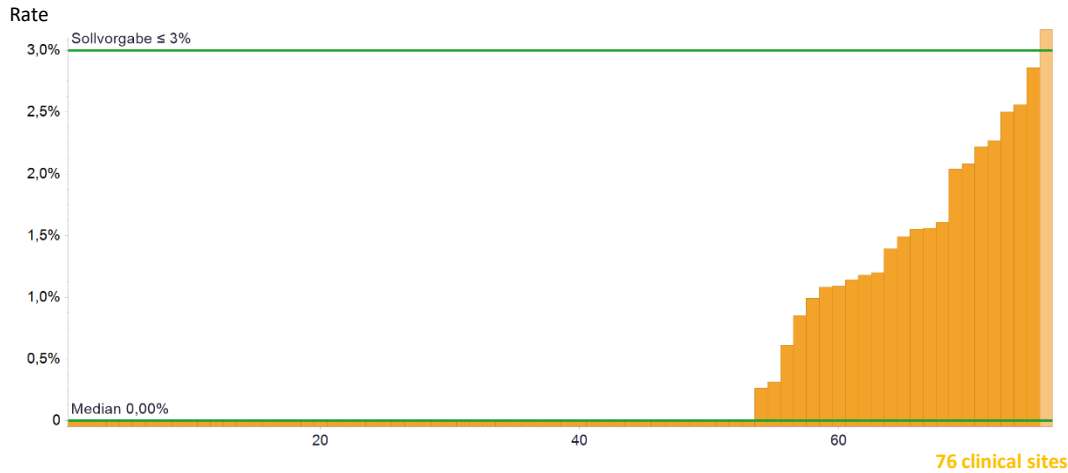
Comments:

By adjusting the denominator, only a comparison with the previous year is possible. The revision rate due to post-operative bleeding has decreased both overall and in the median. All centres succeeded in remaining below a rate of 3%. 24 centres did not have to revise a single case due to post-operative bleeding.

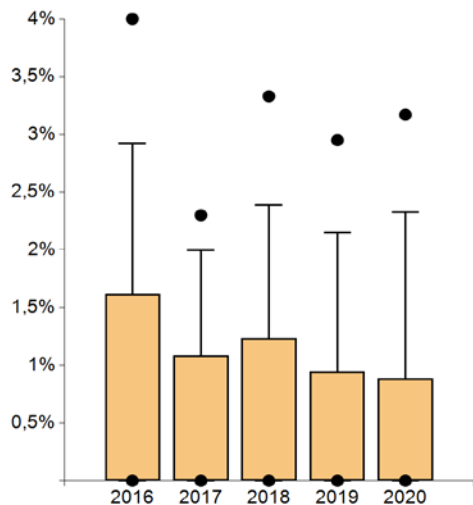
* The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

** Percentage of total patients treated in centres according to the indicator.

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



Sollvorgabe = target value



	2016	2017	2018	2019	2020
Max	4,00%	2,30%	3,33%	2,95%	3,17%
95 th percentile	2,92%	2,00%	2,39%	2,15%	2,33%
75 th percentile	1,62%	1,08%	1,24%	0,94%	0,89%
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 2020		
		Median	Range	Patients total
Numerator	Revision surgery (OPS: 5-893) because of post-operative secondary bleeding (T81.0) after surgeries of the denominator	0*	0 - 3	31
Denominator	SNB surgeries (= denominator indicator 7) + therapeutic LADs for stages III (multiple mentioning per patient possible)	76,5*	25 - 378	7466
Rate	Target value ≤ 3%	0,00%	0,00% - 3,17%	0,42%**

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	75	98,68%

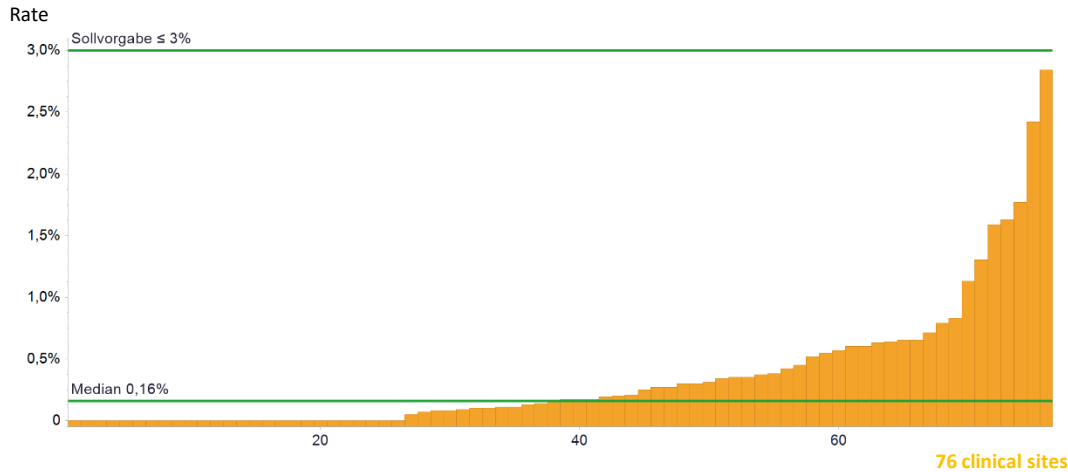
Comments:

With a lower overall rate, one centre failed to meet the target, after all centres had a rate below 3% in the previous year. At this centre, 2 of 63 cases were revised (haematoma clearance without secondary haemorrhage or secondary haemorrhage without vital threat), so that the target was just exceeded at 3.17%.

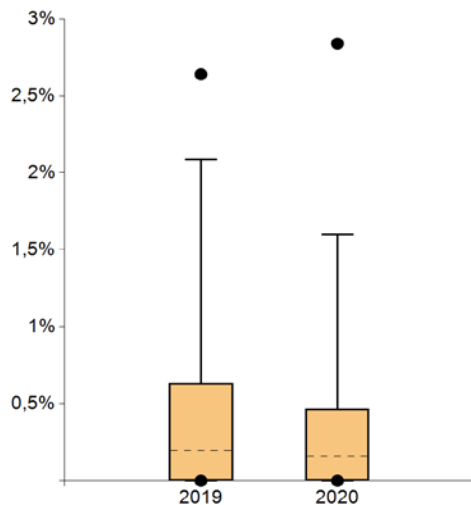
* The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.
 ** Percentage of total patients treated in centres according to the indicator.



12. Revision surgery after post-operative wound infections



Sollvorgabe = target value



	2016	2017	2018	2019	2020
● Max	----	----	----	2,64%	2,84%
95 th percentile	----	----	----	2,09%	1,60%
75 th percentile	----	----	----	0,63%	0,47%
Median	----	----	----	0,20%	0,16%
25 th percentile	----	----	----	0,00%	0,00%
5 th percentile	----	----	----	0,00%	0,00%
● Min	----	----	----	0,00%	0,00%

	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Revision surgery (OPS: 5-893) because of post-operative wound infections (T81.4) after surgeries of the denominator	1*	0 - 37	210
Denominator	Sum numerators Indicators 8 + 9	773*	176 - 5192	69481
Rate	Target value ≤ 3%	0,16%	0,00% - 2,84%	0,30%**

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

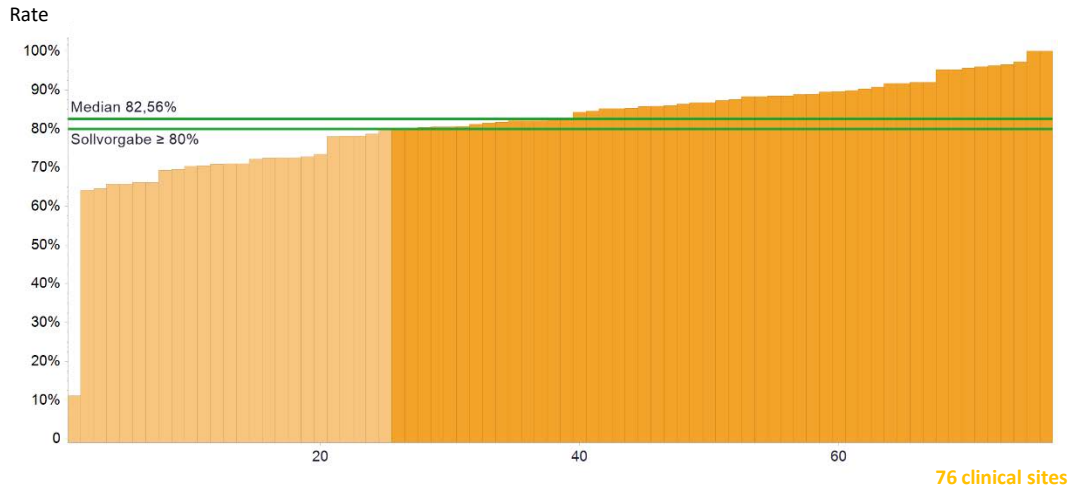
Comments:

As with indicator 10, the temporal comparison is limited to the previous year due to an adjustment of the denominator. With a significantly lower overall rate (previous year: 0.41%) and a lower median, all centres again remained below the 3% target. 26 centres did not count a single patient in the denominator.

* 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.

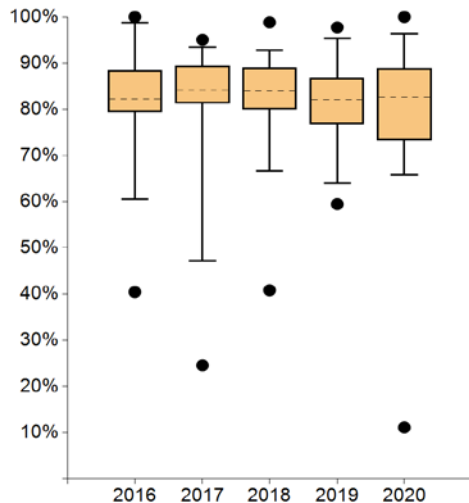
** Percentage of total patients treated in centres according to the indicator.

13. Melanoma: Sentinel node biopsy (GL Melanoma QI)



	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Primary cases of the denominator where SNB is carried out	48,5*	1 - 216	4572
Denominator	Primary cases cutaneous melanoma with a tumour density ≥ pT2a and no sign of locoregional or distant metastasis (cN0, cM0)	64,5*	2 - 265	5548
Rate	Target value ≥ 80%	82,56%	11,11% - 100%	82,41%**

Sollvorgabe = target value



	2016	2017	2018	2019	2020
● Max	100%	95,06%	98,82%	97,73%	100%
95 th percentile	98,69%	93,40%	92,86%	95,37%	96,31%
75 th percentile	88,45%	89,36%	89,02%	86,71%	88,85%
Median	82,18%	84,08%	83,96%	82,02%	82,56%
25 th percentile	79,48%	81,25%	80,00%	76,73%	73,29%
5 th percentile	60,49%	47,15%	66,59%	63,92%	65,77%
● Min	40,45%	24,56%	40,82%	59,46%	11,11%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	51	67,11%

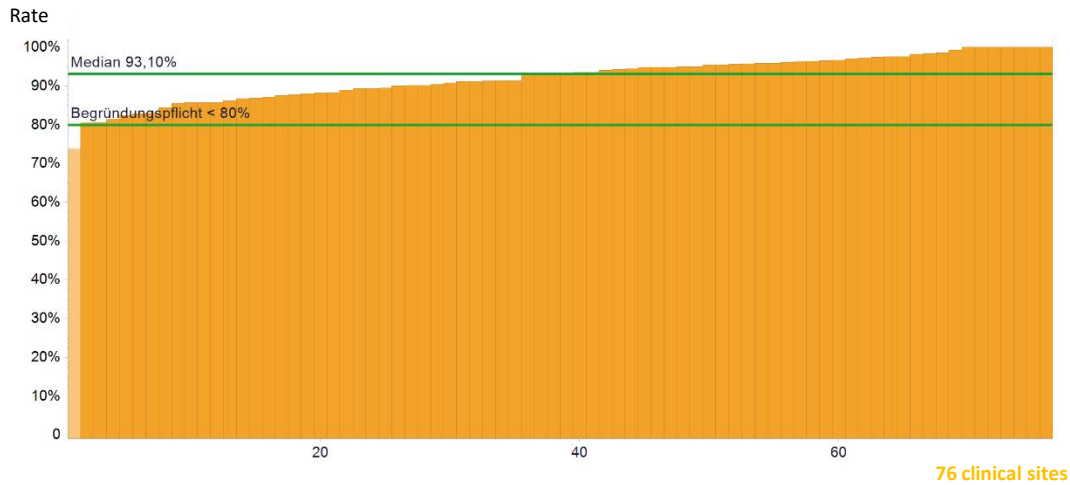
Comments:

The indicator for the SNB is at the previous year's level. Once again, 25 centres failed to meet the target. The most frequent reasons given by the centres were rejection by the patients (24x), old age/bad general condition (16x), comorbidities (13x) and sentinels that could not be shown or detected (10x). In the case of insufficient justifications, the auditors issued hints.

* 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 centres according to the indicator.

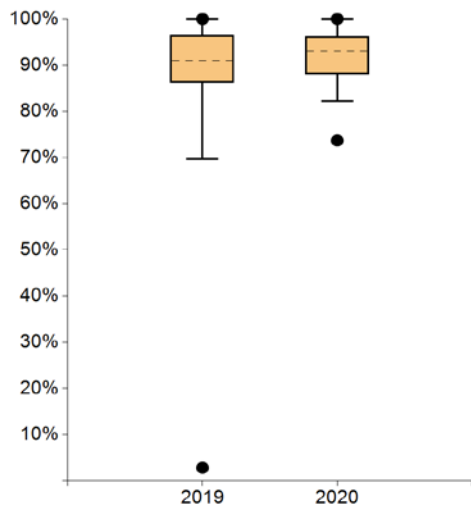
14. Melanoma: Safety margin (1 cm) in the case of radical excision (GL Melanoma QI)



76 clinical sites

Begründungspflicht = Mandatory statement for reason

	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Primary cases with radical excision with a safety margin of 1 cm	95*	3 - 426	7931
Denominator	Primary cases cutaneous melanoma with a curative radical excision in case of a tumour density ≤ 2 mm	101*	3 - 492	8659
Rate	Mandatory statement for reason***<80%	93,10%	73,68% - 100%	91,59%**



	2016	2017	2018	2019	2020
Max	----	----	----	100%	100%
95 th percentile	----	----	----	100%	100%
75 th percentile	----	----	----	96,56%	96,29%
Median	----	----	----	90,98%	93,10%
25 th percentile	----	----	----	86,15%	88,10%
5 th percentile	----	----	----	69,64%	82,20%
Min	----	----	----	2,82%	73,68%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	75	98,68%

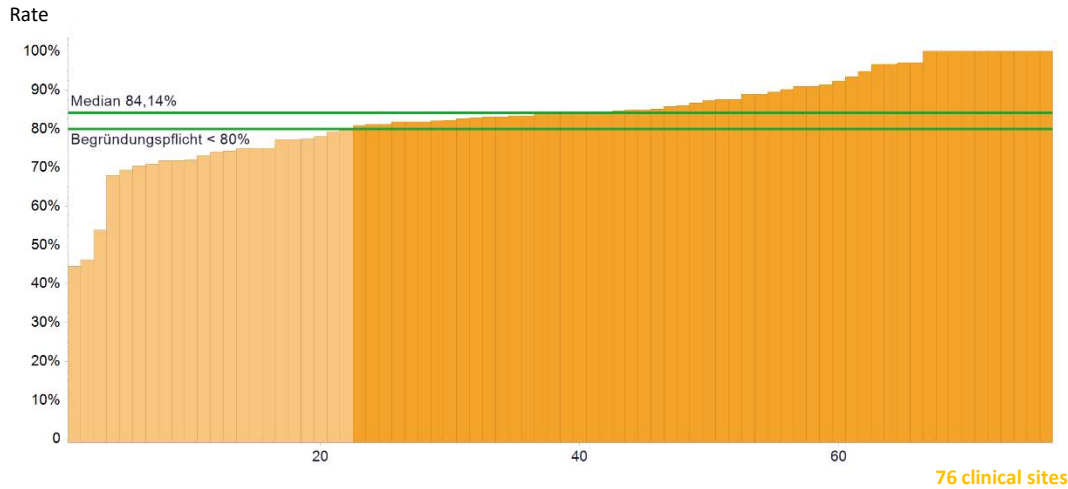
Comments:

Indicators 14 to 18 were compulsorily collected for the first time in the indicator year 2020 and thus allow a more valid overview of the implementation in the centres. In addition, mandatory statements for reasons were introduced for the first time. With regard to the guideline-defined safety margin for melanomas with a tumour density of ≤ 2 mm, one centre was below 80%. This centre performed complete resections in the course of the treatment. In one case, the tumour was too large and could not be completely removed.

* 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 centres according to the indicator.
 *** In the case of values outside the plausibility limit(s), the centres are obliged to provide justification.

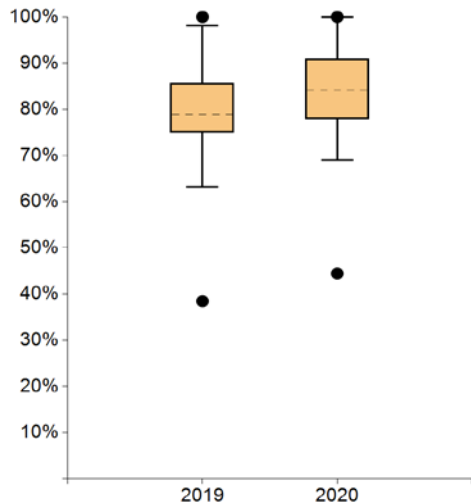


15. Melanoma: Safety margin (2 cm) in the case of radical excision (GL Melanoma QI)



Begründungspflicht = Mandatory statement for reason

	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Primary cases o with radical excision with a safety margin of 2 cm	33,5*	5 - 171	2919
Denomintor	Primary cases cutaneous melonoma with a curative radical excision in case of a tumour density > 2 mm	39*	6 - 206	3481
Rate	Mandatory statement for reason***<80%	84,14%	44,44% - 100%	83,86%**



	2016	2017	2018	2019	2020
● Max	----	----	----	100%	100%
95 th percentile	----	----	----	98,11%	100%
75 th percentile	----	----	----	85,65%	90,91%
Median	----	----	----	78,95%	84,14%
25 th percentile	----	----	----	74,89%	77,88%
5 th percentile	----	----	----	63,22%	69,02%
● Min	----	----	----	38,46%	44,44%

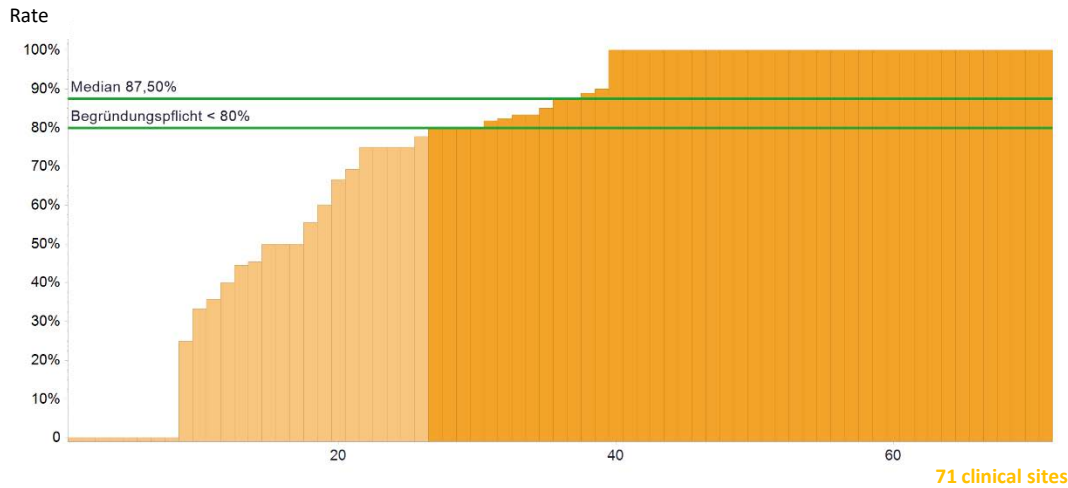
Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	54	71,05%

Comments:

With regard to the safety margin for melanoma excisions with a tumour density of >2 cm, naturally more centres than with indicator 14 were below a quota of 80%. Of the 22 centres that had to justify their rates, 20 referred to a localisation-related (face, acra) reduced safety margin. The patient's wish was invoked 12 times and metastatic melanoma was referred to 8 times. Other reasons such as amputations (4x), old age (5x) and others played a minor role.

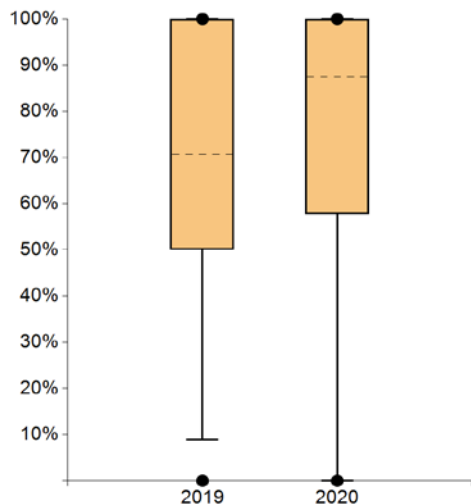
* The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.
 ** Percentage of total patients treated in centres according to the indicator.
 *** In the case of values outside the plausibility limit(s), the centres are obliged to provide justification.

16. Melanoma: Lymphadenectomy (GL Melanoma QI)



Begründungspflicht = Mandatory statement for reason

	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Primary cases with therapeutic LAD	3*	0 - 17	293
Denominator	Primary cases with melanoma with each pT and c/pN1b or c/pN2b or c/pN3b and M0	4*	1 - 20	385
Rate	Mandatory statement for reason***<80%	87,50%	0,00% - 100%	76,10%**



	2016	2017	2018	2019	2020
Max	----	----	----	100%	100%
95 th percentile	----	----	----	100%	100%
75 th percentile	----	----	----	100%	100%
Median	----	----	----	70,75%	87,50%
25 th percentile	----	----	----	50,00%	57,78%
5 th percentile	----	----	----	8,89%	0,00%
Min	----	----	----	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
71	93,42%	45	63,38%

Comments:

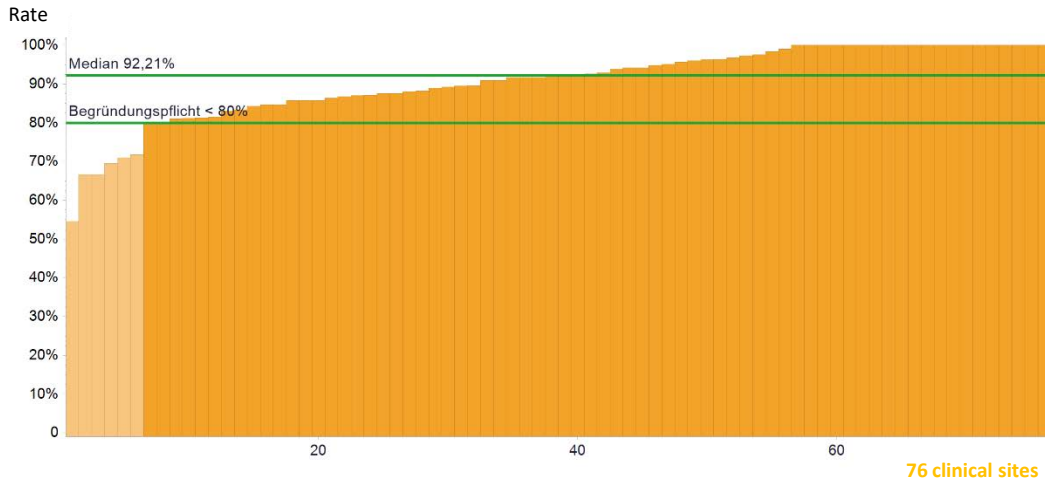
The fulfilment of this quality indicator of the guideline has improved significantly compared to the previous year. A good ¾ of the eligible patients received a therapeutic LAD. 5 centres did not count any patients in the denominator. 26 centres had to justify rates below 80%, whereby in some cases small patient numbers in the denominator must be taken into account here: By far the most frequent reason (19 mentions) was rejection by the patients. All other reasons were mentioned only sporadically. These could be plausibilised 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 centres according to the indicator.

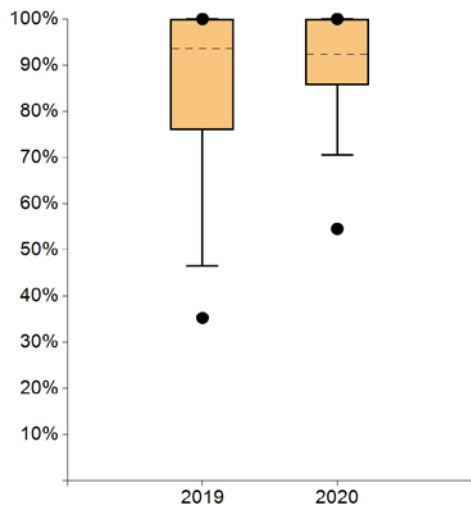
*** In the case of values outside the plausibility limit(s), the centres are obliged to provide justification.

17. Melanoma: Mutation analysis for BRAF



Begründungspflicht = Mandatory statement for reason

	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Primary cases of the denominator with mutation analysis for BRAF	23*	5 - 122	2109
Denominator	Primary cases with cutaneous melanoma from stage III	26*	5 - 152	2343
Rate	Mandatory statement for reason***<80%	92,21%	54,55% - 100%	90,01%**



	2016	2017	2018	2019	2020
● Max	----	----	----	100%	100%
95 th percentile	----	----	----	100%	100%
75 th percentile	----	----	----	100%	100%
Median	----	----	----	93,54%	92,21%
25 th percentile	----	----	----	75,94%	85,71%
5 th percentile	----	----	----	46,43%	70,56%
● Min	----	----	----	35,29%	54,55%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	70	92,11%

Comments:

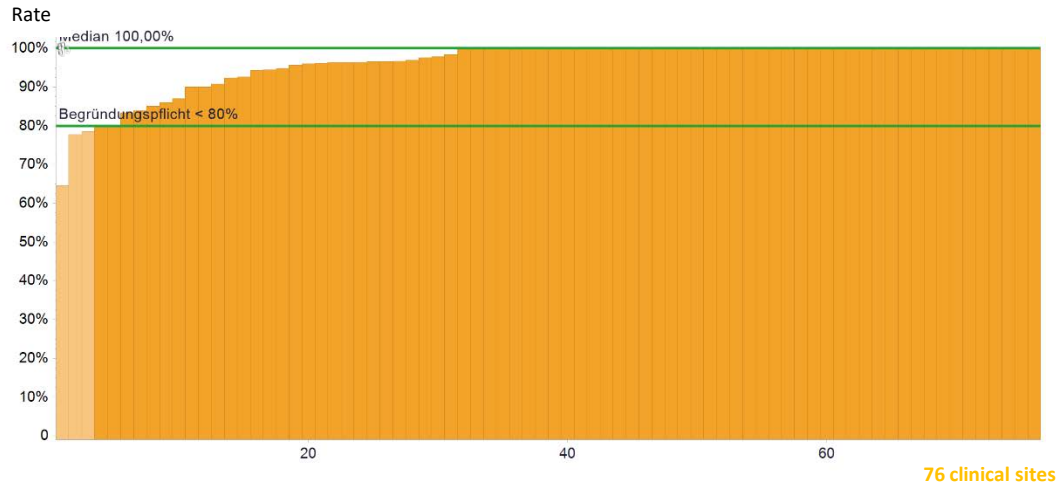
The indicator already shows a very positive development in the second year of the documentation, so that over 90% of cutaneous melanomas from stage III have received a BRAF mutation analysis. 6 centres justified their rates below 80% with, among other things, too little examination material (3x), the lack of recommendation of adjuvant therapy (in case of old age and/or multimorbidity) (3x) or administered immunotherapy (2x).

* 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 centres according to the indicator.

*** In the case of values outside the plausibility limit(s), the centres are obliged to provide justification.

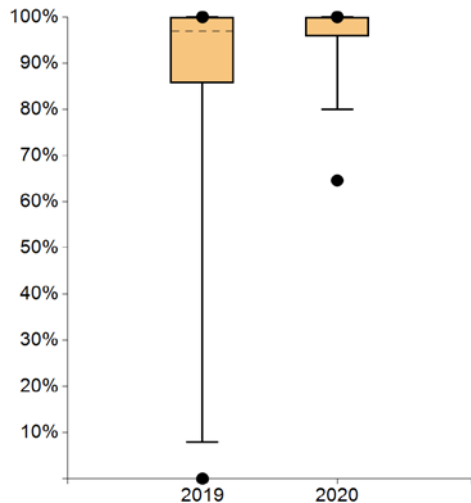
18. Melanoma: LDH determination (GL Melanoma QI 9)



76 clinical sites

Begründungspflicht = Mandatory statement for reason

	Indicator definition	All Clinical sites 2020		
		Median	Range	Patients total
Numerator	Patients with LDH determination	23,5*	1 - 136	2178
Denominator	Primary cases and patients with a stage shift/recurrence with melanoma developing into stage IV	23,5*	1 - 141	2265
Rate	Mandatory statement for reason***<80%	100%	64,58% - 100%	96,16%**



	2016	2017	2018	2019	2020
● Max	----	----	----	100%	100%
95 th percentile	----	----	----	100%	100%
75 th percentile	----	----	----	100%	100%
Median	----	----	----	96,92%	100%
25 th percentile	----	----	----	85,71%	95,85%
5 th percentile	----	----	----	8,00%	80,00%
● Min	----	----	----	0,00%	64,58%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
76	100,00%	73	96,05%

Comments:

The degree of fulfilment of this guideline indicator has improved significantly, the median is now 100%. Only 3 centres were below a rate of 80%. Here, the centres referred to individual case decisions (e.g. multimorbidity) or special constellations (prematurely deceased patient, individual omission, only consultative presentation). A systematic error was not identified 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 centres according to the indicator.

*** In the case of values outside the plausibility limit(s), the centres are obliged to provide justification.

WISSEN AUS ERSTER HAND FIRST HAND KNOWLEDGE



More information at www.krebsgesellschaft.de

Authors

Deutsche Krebsgesellschaft e.V.
Deutsche Dermatologische Gesellschaft e.V.
Arbeitsgemeinschaft Dermatologische Onkologie
Zertifizierungskommission Hautkrebszentren
Carmen Loquai, Vorsitzende Zertifizierungskommission
Ralf Gutzmer, Vorsitzender Zertifizierungskommission
Simone Wesselmann, Deutsche Krebsgesellschaft e.V.
Johannes Rückher, Deutsche Krebsgesellschaft e.V.
Martin Utzig, Deutsche Krebsgesellschaft e.V.
Ellen Griesshammer, Deutsche Krebsgesellschaft e.V.
Carolin Nödler, OnkoZert
Florina Dudu, OnkoZert

Imprint

Publisher and responsible for content:
Deutsche Krebsgesellschaft (DKG)
Kuno-Fischer-Straße 8
14057 Berlin
Tel: +49 (030) 322 93 29 0
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; Stand 09.06.2022

ISBN: 978-3-910336-06-3

