

Supplementary Material

Supplementary table 1. Disease and treatment characteristics and their association with postponed/missed appointments.

Characteristic	Whole cohort	Postponed/missed appointments		<i>p</i> ^b
	<i>n</i> =324 ^a <i>n</i> (%)	Yes, <i>n</i> =48 ^a <i>n</i> (%)	No, <i>n</i> =276 ^a <i>n</i> (%)	
AJCC 2017 stage				
I	157 (48.5)	27 (56.3)	130 (47.1)	0.245
II	65 (20.1)	7 (14.6)	58 (21.0)	
III	57 (17.6)	5 (10.4)	52 (18.8)	
IV	45 (13.9)	9 (18.8)	36 (13.0)	
Disease duration^c				
<3 months	18 (5.6)	0 (0.0)	18 (6.5)	0.176
3-12 months	72 (22.3)	7 (14.9)	65 (23.6)	
>1-3 years	149 (46.1)	28 (59.6)	121 (43.8)	
>3-5 years	47 (14.6)	6 (12.8)	41 (14.9)	
>5-10 years	25 (7.7)	5 (10.6)	20 (7.2)	
>10 years	12 (3.7)	1 (2.1)	11 (4.0)	
Current tumour burden				
No	298 (92.0)	43 (89.6)	255 (92.4)	0.509
Yes	26 (8.0)	5 (10.4)	21 (7.6)	
Primary melanoma	2 (0.6)	0 (0.0)	2 (0.7)	0.473
Regional lymph node metastases	4 (1.2)	0 (0.0)	4 (1.4)	0.289
Satellite or in transit-metastases	5 (1.5)	2 (4.2)	3 (1.1)	0.190
Distant metastases	21 (6.5)	5 (10.4)	16 (5.8)	0.225
Current treatment^d				
No	220 (67.9)	41 (85.4)	179 (64.9)	0.005
Yes	104 (32.1)	7 (14.6)	97 (35.1)	
Kind of current treatment^e				
Patients	104 (100.0)	7 (100.0)	97 (100.0)	
Surgery^e	49 (47.1)	4 (57.1)	45 (46.4)	0.582
Primary melanoma	39 (37.5)	2 (28.6)	37 (38.1)	0.613
SLNB	18 (17.3)	1 (14.3)	17 (17.5)	0.827
CLND	0 (0.0)	0 (0.0)	0 (0.0)	n.a. ^f
Other metastases	10 (9.6)	2 (28.6)	8 (8.2)	0.078
Radiotherapy^e	3 (2.9)	0 (0.0)	3 (3.1)	0.637
Systemic treatment^e	66 (63.5)	5 (71.4)	61 (62.9)	0.650
Interferon- α	2 (1.9)	0 (0.0)	2 (2.1)	0.701
ICI	53 (51.0)	3 (42.9)	50 (51.5)	0.657
PD-1 inhibitor monotherapy	50 (48.1)	3 (42.9)	47 (48.5)	0.662
Nivolumab + ipilimumab ^g	3 (2.9)	0 (0.0)	3 (3.1)	
Ipilimumab monotherapy	0 (0.0)	0 (0.0)	0 (0.0)	
BRAF/MEK inhibitors	13 (12.5)	2 (28.6)	11 (11.3)	0.183
Systemic treatment intention^e				
Adjuvant	37 (35.6)	2 (28.6)	35 (36.1)	0.452
Palliative	29 (27.9)	3 (42.9)	26 (26.8)	
Response to current treatment^e				
CR	77 (74.0)	4 (57.1)	73 (75.3)	0.367
PR	3 (2.9)	1 (14.3)	2 (2.1)	
SD	10 (9.6)	1 (14.3)	9 (9.3)	
PD	4 (3.8)	0 (0.0)	4 (4.1)	
Not yet known	10 (9.6)	1 (14.3)	9 (9.3)	
Current treatment goal^h				
Total	105 (100.0)	8 (100.0) ^h	97 (100.0)	
Curative	77 (73.3)	5 (62.5)	72 (74.2)	0.870
Palliative	28 (26.7)	3 (37.5)	25 (25.8)	0.325
Treatment experience^{a,i}				
Surgery	322 (99.4)	48 (100.0)	274 (99.3)	0.554
Primary melanoma	314 (96.9)	47 (97.9)	267 (96.7)	0.663
SLNB	219 (67.6)	35 (72.9)	184 (66.7)	0.393
CLND	53 (16.4)	6 (12.5)	47 (17.0)	0.434
Other metastases	48 (14.8)	8 (16.7)	40 (14.5)	0.696
Radiotherapy	19 (5.9)	2 (4.2)	17 (6.2)	0.588
Systemic treatment	104 (32.1)	12 (25.0)	92 (33.3)	0.254
Interferon- α	34 (10.5)	4 (8.3)	30 (10.9)	0.597
ICI	78 (24.1)	9 (18.8)	69 (25.0)	0.350
PD-1 inhibitor monotherapy	71 (21.9)	8 (16.7)	63 (22.8)	0.169
Nivolumab + ipilimumab ^g	5 (1.6)	0 (0.0)	5 (1.8)	
Ipilimumab monotherapy	2 (0.6)	1 (2.1)	1 (0.4)	
BRAF/MEK inhibitors	16 (4.9)	3 (6.3)	13 (4.7)	0.650
Chemotherapy	6 (1.9)	1 (2.1)	5 (1.8)	0.897
Other ^j	6 (1.9)	0 (0.0)	6 (2.2)	0.302

- ^a For calculation of proportions, the total number of participants in each group was set at 100%. Percentages do not always add up to 100% due to rounding and multiple answers.
- ^b Differences between participants who postponed/missed their appointment and participants who kept all appointments were tested for significance using the Chi-square test.
- ^c Missing data: disease duration n=1.
- ^d Current treatments comprised all melanoma therapies obtained between February 1st 2020 and the date of study participation.
- ^e Percentages refer to all patients with current treatment (n=104, n=7 or n=97, 100%).
- ^f N.a.: not assessed.
- ^g Combination therapy with nivolumab and ipilimumab was routinely followed by nivolumab monotherapy.
- ^h One participant first obtained surgery with curative intention and subsequently required palliative systemic treatment. Therefore, n=105 was set at 100%.
- ⁱ All treatments ever received, either currently or in the past.
- ^j Other treatments included hyperthermic limb perfusion (n=1), electrochemotherapy (n=1), cryotherapy (n=2), laser treatment (n=1) and radiofrequency ablation (n=2). One patient received both hyperthermic limb perfusion and electrochemotherapy. Significant findings are highlighted in bold.
- AJCC: American Joint Committee on Cancer; CLND: complete lymph node dissection; CR: complete response; ICI: immune checkpoint inhibitors; n: number; PD: progressive disease; PR: partial response; SD: stable disease; SLNB: sentinel lymph node biopsy.

Supplementary table 2. Treatment changes or postponement due to the pandemic.

Characteristics	Patient 1	Patient 2	Patient 3	Patient 4
Sex Age AJCC stage Current tumour burden Kind of tumour burden	male 54 IV yes brain and lung metastasis	female 85 IIB yes R1 situation after primary melanoma excision	female 30 IB no	female 54 IIID no
Current treatment Treatment intention Kind of change	surgery of brain and lung metastasis, radiotherapy, pembrolizumab palliative hypofractionated radiotherapy after neurosurgery of the brain metastasis (6 sessions with 4 Gy instead of 12 sessions with 3 Gy)	wide excision with 2 cm margins curative wide excision with safely margins delayed for 4 weeks due to COVID-19 outbreak in another hospital	wide excision with 1 cm margins, SLND curative wide excision with safety margins and SLND delayed for 4 weeks on patient's request	adjuvant pembrolizumab curative pembrolizumab 400 mg 6-weekly instead of 200 mg 3-weekly
Level of concern for COVID-19 Scale 0-100 5-point scale Level of concern for melanoma Scale 0-100 5-point scale	68 High 60 Moderate	20 Low 20 Low	30 Moderate 100 Very high	20 Low 25 Moderate
EQ-5D-5L	0.799	0.369	0.756	0.913
Comorbidities	Hypothyroidism, second melanoma	hypertension, COPD, renal insufficiency, arthrosis, restless legs	none	arthropathy, autoimmune thyroiditis, allergies, unilateral deafness

AJCC: American Joint Committee on Cancer; COPD: chronic obstructive pulmonary disease; EQ-5D-5L: EuroQoL 5-Dimension 5-Level health-related quality of life score; Gy: grey; SLND: sentinel lymph node biopsy.

Supplementary table 3. Comorbidities and their association with postponed/missed appointments.

Comorbidity	Whole cohort	Postponed/missed appointment		<i>p</i> ^b
	<i>n</i> =324 ^a <i>n</i> (%)	Yes, <i>n</i> =48 ^a <i>n</i> (%)	No, <i>n</i> =276 ^a <i>n</i> (%)	
Hypertension	181 (55.9)	28 (58.3)	153 (55.4)	0.709
Other cardiovascular diseases	108 (33.3)	16 (33.3)	92 (33.3)	1.000
Pulmonary diseases	41 (12.7)	7 (14.6)	34 (12.3)	0.663
Hepatic diseases	27 (8.3)	5 (10.4)	22 (8.0)	0.572
Renal diseases	40 (12.3)	6 (12.5)	34 (12.3)	0.972
Urologic diseases	33 (10.2)	5 (10.4)	28 (10.1)	0.954
Gastrointestinal diseases	41 (12.7)	5 (10.4)	36 (13.0)	0.613
Ophthalmologic diseases	25 (7.7)	6 (12.5)	19 (6.9)	0.178
Diabetes mellitus	56 (17.3)	10 (20.8)	46 (16.7)	0.481
Arthropathy	139 (42.9)	23 (47.9)	116 (60.1)	0.447
Thyroid disease	101 (31.2)	12 (25.0)	89 (32.2)	0.317
Autoimmune disease	4 (1.2)	0 (0.0)	4 (1.4)	0.401
Immunosuppression	15 (4.6)	4 (8.3)	11 (4.0)	0.186
Allergies	89 (27.5)	15 (31.3)	74 (26.8)	0.525
Depression	27 (8.3)	6 (12.5)	21 (7.6)	0.258
Anxiety disorder	15 (4.6)	6 (12.5)	9 (3.3)	0.005
Other mental illnesses	4 (1.2)	1 (2.1)	3 (1.1)	0.564
Dyslipidaemia	104 (32.1)	15 (31.3)	89 (32.2)	0.891
Cancer				
≥2 MM or additional MM <i>in situ</i> ^c	36 (11.1)	6 (12.5)	30 (10.9)	0.747
Other skin cancer	34 (10.5)	6 (12.5)	28 (10.1)	0.623
Other cancer	51 (15.8)	11 (22.9)	40 (14.5)	0.142
Other comorbidities	99 (30.6)	17 (35.4)	82 (29.7)	0.428
No comorbidity	28 (8.6)	3 (6.3)	25 (9.1)	0.523
≥5 comorbidities	139 (42.9)	25 (52.1)	114 (41.3)	0.164

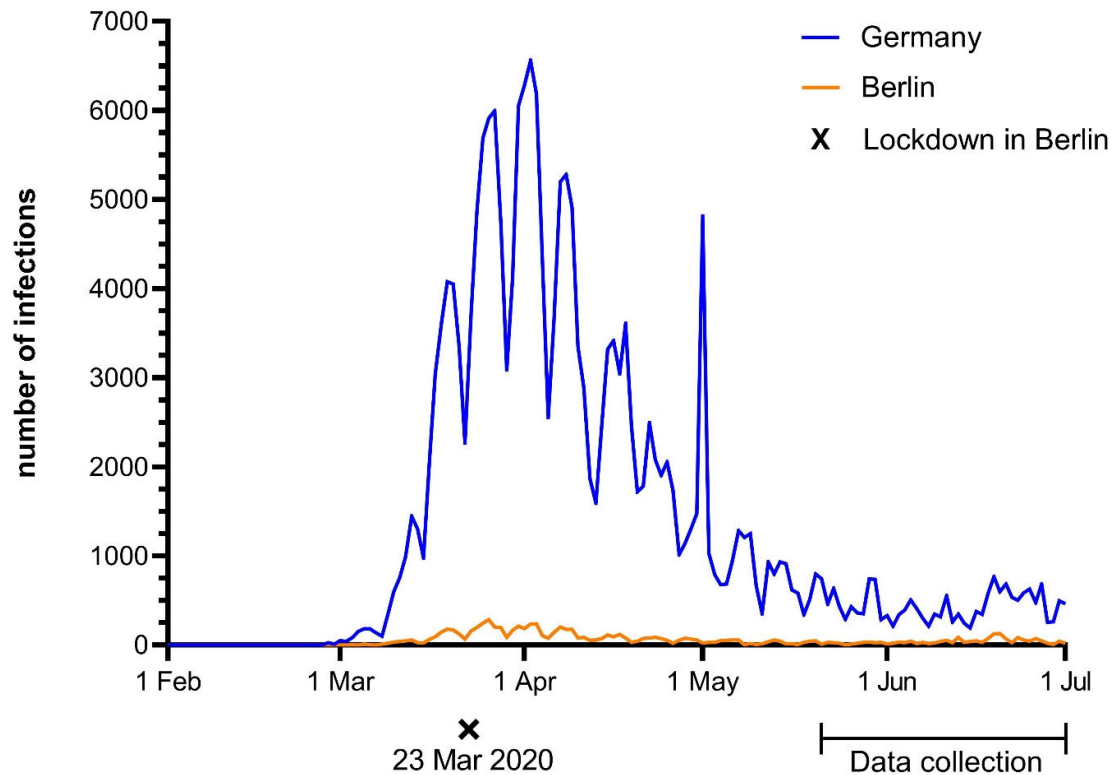
^a For calculation of proportions, the number of participants in each group was set at 100%.

^b Differences between participants who postponed/missed their appointment and participants who kept all appointments were tested for significance using the Chi-square test.

^c missing data: ≥2 MM or additional MM *in situ* *n*=1.

Significant findings are highlighted in bold. MM: malignant melanoma.

Supplementary figure 1. Number of new SARS-CoV-2 infections per day in Germany and Berlin between February 1st 2020 and July 1st 2020.



Sources:

WHO coronavirus disease (COVID-19) dashboard. Geneva: World Health Organization, 2020. Available at: <https://covid19.who.int/> (accessed 2020-08-05).

Robert-Koch-Institute: COVID-19-Dashboard 2020. Available at:

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