

**Supplementary Data Regarding the Manuscript “A Multicenter Evaluation of Different Chemotherapy Regimens in Older Adults With Head and Neck Squamous Cell Carcinoma Undergoing Definitive Chemoradiation”**

**Supplementary table 1. Baseline Characteristics of Patients 65 Years and Older Who Underwent Definitive Chemoradiation for Locoregionally Advanced Head and Neck Squamous Cell Carcinoma between 2005 and 2019 Depending on the Choice of Concomitant Chemotherapy.** CCI, Charlson Comorbidity Index; ECOG, Eastern Cooperative Oncology Group; eGFR; estimated glomerular filtration rate; HPV, human papillomavirus.

Characteristic	Cisplatin mono (n=310)	Carboplatin-based (n=106)	Mitomycin-based (n=114)	p
Age, median (IQR), y	71 (68-75)	73 (70-77)	73 (69-77)	.004 <sup>a</sup>
Sex				.126 <sup>b</sup>
Female	106 (34%)	25 (24%)	37 (32%)	
Male	204 (66%)	81 (76%)	77 (68%)	
ECOG				<.001 <sup>b</sup>
0	133 (43%)	36 (34%)	14 (12%)	
1	154 (50%)	44 (42%)	64 (56%)	
≥2	18 (6%)	25 (24%)	36 (32%)	
Missing	5 (2%)	1 (1%)	0 (0%)	
CCI, median (IQR)	1 (0-3)	2 (1-4)	1 (0-3)	<.001 <sup>a</sup>
Smoking				.002 <sup>b</sup>
Never smoker/limited smoking	98 (32%)	32 (30%)	14 (12%)	
Smoking >10 pack-years	179 (58%)	63 (59%)	75 (66%)	
Missing	33 (11%)	11 (10%)	25 (22%)	
Localization				.103 <sup>b</sup>
Oral cavity	38 (12%)	10 (9%)	17 (15%)	
Oropharynx	175 (56%)	58 (55%)	63 (55%)	
Hypopharynx	46 (15%)	16 (15%)	14 (12%)	
Larynx	34 (11%)	13 (12%)	20 (18%)	
Oro-/Hypopharynx	17 (5%)	9 (8%)	0 (0%)	
Clinical T stage				.336 <sup>b</sup>
cT1	19 (6%)	10 (9%)	3 (3%)	
cT2	45 (15%)	17 (16%)	13 (11%)	
cT3	92 (30%)	34 (32%)	39 (34%)	
cT4	154 (50%)	45 (42%)	59 (52%)	
Clinical N stage				.187 <sup>b</sup>
cN0	48 (15%)	14 (13%)	25 (22%)	
cN1	43 (14%)	14 (13%)	13 (11%)	
cN2a	6 (2%)	2 (2%)	5 (4%)	
cN2b	67 (22%)	24 (23%)	28 (25%)	
cN2c	68 (22%)	21 (20%)	28 (25%)	
cN2, not specified	58 (19%)	21 (20%)	13 (11%)	
cN3	20 (6%)	10 (9%)	2 (2%)	
HPV status of oropharynx carcinomas	n=175	n=58	n=63	.034 <sup>b</sup>
HPV-positive	93 (53%)	33 (57%)	13 (21%)	
HPV-negative	49 (28%)	6 (10%)	10 (16%)	
Missing	33 (19%)	19 (33%)	40 (63%)	
eGFR				<.001 <sup>b</sup>
>60 mL/min/1.73m <sup>2</sup>	166 (54%)	34 (32%)	40 (35%)	
≤60 mL/min/1.73m <sup>2</sup>	21 (7%)	15 (14%)	26 (23%)	
missing	123 (40%)	57 (54%)	48 (42%)	
eGFR, median (IQR), mL/min/1.73m <sup>2</sup>	83.0 (70.6-95.0)	75.0 (55.0-99.4)	67.5 (52.8-90.0)	.05 <sup>a</sup>
Radiotherapy dose, median (IQR), Gy	70.0 (69.3-70.0)	70.0 (69.0-70.0)	70.0 (70.0-71.5)	.171 <sup>a</sup>
Radiotherapy completion				.549 <sup>b</sup>
Radiotherapy completed	280 (90%)	93 (88%)	105 (92%)	
Radiotherapy not completed	30 (10%)	13 (12%)	9 (8%)	

<sup>a</sup> one-way-ANOVA

<sup>b</sup>  $\chi^2$ -test

**Supplementary table 2. Details of single-agent cisplatin protocols.** D, day; wk=week. Note that the initially prescribed cisplatin regimen was considered for this analysis.

Single-agent cisplatin protocol	Number	%
30-40 mg/m <sup>2</sup> weekly	157	51
100 mg/m <sup>2</sup> three-weekly	9	3
Others*	144	46
Cisplatin protocol	Median	IQR
Cumulative cisplatin dose of single-agent cisplatin protocols <sup>a</sup>	180 mg/m <sup>2</sup>	120-200 mg/m <sup>2</sup>
Cumulative cisplatin dose of any cisplatin-containing protocols <sup>b</sup>	180 mg/m <sup>2</sup>	120-200 mg/m <sup>2</sup>
	Number	%
Cumulative cisplatin dose $\geq$ 200 mg/m <sup>2</sup> in single-agent cisplatin protocols <sup>a</sup>	146	48
Cumulative cisplatin dose $\geq$ 200 mg/m <sup>2</sup> in cisplatin-containing protocols <sup>b</sup>	191	42

\* Cisplatin 20 mg/m<sup>2</sup> d1-5 in wk1,4,7 (n=33), cisplatin 25 mg/m<sup>2</sup> d1-4 in wk1,4,7 (n=2), cisplatin 33 mg/m<sup>2</sup> 1-3 in wk1,4,7 (n=41), cisplatin 50 mg/m<sup>2</sup> d1-2 in wk1,4,7 (n=12), cisplatin 15-25 mg/m<sup>2</sup> d1-5 (or d1-4 for 25 mg/m<sup>2</sup>) in wk1,5 (n=34), cisplatin 20 mg/m<sup>2</sup> d1-3 in wk1,5 (n=18), cisplatin 6 mg/m<sup>2</sup> d1-5 in wk1,2,4,5 (n=1), cisplatin 6 mg/m<sup>2</sup> daily (n=1), exact cisplatin regimen unknown (n=2)

<sup>a</sup> 8 of 310 patients with unknown cumulative cisplatin dose

<sup>b</sup> 12 of 463 patients with unknown cumulative cisplatin dose

**Supplementary table 3. Details of weekly cisplatin protocols.**

Cycles of 30-40 mg/m <sup>2</sup> weekly cisplatin	Number	%
1	5	3
2	7	4
3	10	6
4	43	27
5	38	24
6	28	18
7	17	11
unknown	9	6
Single weekly cisplatin dose		
30 mg/m <sup>2</sup>	18	11
40 mg/m <sup>2</sup>	130	83
unknown	9	6
	Median	IQR
Cumulative cisplatin dose of patients treated with weekly cisplatin <sup>a</sup>	180 mg/m <sup>2</sup>	160-240 mg/m <sup>2</sup>
	Number	%
Cumulative cisplatin dose $\geq$ 200 mg/m <sup>2</sup> of patients treated with weekly cisplatin <sup>a</sup>	69	46

<sup>a</sup> 6 of 157 patients with unknown cumulative cisplatin dose

**Supplementary table 4. Cox Proportional Hazard Regression Analysis for Overall Survival in Patients Aged 65 Years and Older Who Were Treated With Definitive Chemoradiation for Locally Advanced Head and Neck Squamous Cell Carcinoma (2005-2019).** The prognostic value of single-agent cisplatin was analyzed by comparing it with all other utilized chemotherapy regimens (which also consisted of multi-agent cisplatin regimens). Multiple imputation was performed regarding missing values. CCI, Charlson Comorbidity Index; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; HPV, human papillomavirus; HR, hazard ratio.

Characteristic	HR (95% CI)	<i>p</i>
Age	1.04 (1.00-1.08)	.03
Sex (reference, female)	1.38 (1.01-1.90)	.04
ECOG status (reference, 0)		
1	1.66 (1.17-2.37)	.005
2	1.87 (1.15-3.04)	.01
3	1.10 (0.38-3.20)	.87
CCI	1.07 (1.00-1.14)	.04
Smoking (reference, never/limited smoking)	1.19 (0.86-1.65)	.29
Localization (reference, oral cavity)		
Oropharynx	0.60 (0.40-0.90)	.01
Hypopharynx	0.66 (0.42-1.05)	.08
Larynx	0.62 (0.38-1.00)	.05
Oro-/Hypopharynx (multi-level)	0.67 (0.29-1.56)	.36
Clinical T stage (reference, cT1)		
T2	0.75 (0.36-1.57)	.44
T3	0.99 (0.50-1.94)	.97
T4	1.34 (0.70-2.57)	.38
Clinical N stage (reference, cN0)		
cN1	1.32 (0.78-2.24)	.29
cN2	1.56 (1.07-2.28)	.02
cN3	1.90 (0.93-3.88)	.08
HPV status (reference, HPV-positive)	2.61 (1.60-4.26)	<.001
Year of radiotherapy	1.04 (0.99-1.08)	.15
Chemotherapy other than single-agent cisplatin	0.98 (0.72-1.33)	.90

**Supplementary table 5. Cox Proportional Hazard Regression Analysis for Overall Survival in Older Adults with Locally Advanced Head and Neck Squamous Cell Carcinoma Treated with Chemoradiation Between 2005 and 2019.** The prognostic value of cisplatin-based chemotherapy (both single-agent cisplatin and multi-agent cisplatin-containing regimens) was analyzed. Multiple imputation was performed regarding missing values. CCI, Charlson Comorbidity Index; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; HPV, human papillomavirus; HR, hazard ratio.

Characteristic	HR (95% CI)	<i>p</i>
Age	1.02 (1.00-1.05)	.05
Sex (reference, female)	1.46 (1.13-1.87)	.003
ECOG status (reference, 0)		
1	1.69 (1.28-2.23)	<.001
2	2.07 (1.40-3.05)	<.001
3	1.10 (0.43-2.80)	.84
CCI	1.07 (1.02-1.14)	.01
Smoking (reference, never/limited smoking)	1.13 (0.87-1.46)	.36
Localization (reference, oral cavity)		
Oropharynx	0.72 (0.52-1.00)	.05
Hypopharynx	0.68 (0.47-0.98)	.04
Larynx	0.63 (0.41-0.95)	.03
Oro-/Hypopharynx (multi-level)	0.96 (0.52-1.77)	.90
Clinical T stage (reference, cT1)		
T2	0.71 (0.37-1.33)	.28
T3	0.91 (0.51-1.61)	.73
T4	1.12 (0.65-1.94)	.69
Clinical N stage (reference, cN0)		
cN1	1.63 (1.05-2.52)	.03
cN2	1.94 (1.39-2.70)	<.001
cN3	2.37 (1.35-4.16)	.003
HPV status (reference, HPV-positive)	3.21 (2.11-4.89)	<.001
Year of radiotherapy	1.03 (1.00-1.07)	.07
Chemotherapy other than cisplatin-based	1.10 (0.85-1.41)	.47

**Supplementary table 6. Cox Proportional Hazard Regression Analysis for Overall Survival in Older Adults with Locally Advanced Head and Neck Squamous Cell Carcinoma Treated with Chemoradiation Between 2005 and 2019.** The prognostic value of a cumulative cisplatin dose  $\geq 200$  mg/m<sup>2</sup> was analyzed. Multiple imputation was performed regarding missing values. CCI, Charlson Comorbidity Index; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; HPV, human papillomavirus; HR, hazard ratio.

Characteristic	HR (95% CI)	<i>p</i>
Age	1.06 (1.00-1.12)	.04
Sex (reference, female)	1.50 (0.97-2.34)	.07
ECOG status (reference, 0)		
1	1.84 (1.17-2.90)	.008
2	1.76 (0.78-3.95)	.17
3	2.88 (0.77-10.76)	.12
CCI	1.07 (0.96-1.18)	.21
Smoking (reference, never/limited smoking)	1.56 (0.99-2.45)	.05
Localization (reference, oral cavity)		
Oropharynx	0.52 (0.30-0.89)	.02
Hypopharynx	0.61 (0.33-1.12)	.10
Larynx	0.81 (0.42-1.55)	.52
Oro-/Hypopharynx (multi-level)	0.63 (0.22-1.83)	.40
Clinical T stage (reference, cT1)		
T2	0.83 (0.25-2.82)	.77
T3	1.44 (0.48-4.33)	.52
T4	2.07 (0.72-5.96)	.18
Clinical N stage (reference, cN0)		
cN1	1.62 (0.74-3.56)	.23
cN2	2.30 (1.31-4.05)	.003
cN3	2.20 (0.69-6.98)	.18
HPV status (reference, HPV-positive)	2.79 (1.28-6.11)	.01
Year of radiotherapy	1.02 (0.95-1.09)	.57
Cumulative cisplatin dose $\geq 200$ mg/m <sup>2</sup>	0.71 (0.42-1.07)	.10

**Supplementary table 7. Fine-Gray Competing Risk Regression Analysis for Incidence of Locoregional Failure in Older Adults with Locally Advanced Head and Neck Squamous Cell Carcinoma Treated with Chemoradiation Between 2005 and 2019.** The prognostic value of a cumulative cisplatin dose  $\geq 200$  mg/m<sup>2</sup> was analyzed. Multiple imputation was performed regarding missing values. CCI, Charlson Comorbidity Index; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; HPV, human papillomavirus; SHR, subhazard ratio.

Characteristic	SHR (95% CI)	<i>p</i>
Age	0.98 (0.92-1.05)	.56
Sex (reference, female)	1.17 (0.61-2.25)	.63
ECOG status (reference, 0)		
1	1.42 (0.69-2.94)	.34
2	0.95 (0.21-4.36)	.95
3	6.03 (0.53-69.26)	.15
CCI	0.76 (0.60-0.98)	.03
Smoking (reference, never/limited smoking)	1.25 (0.61-2.55)	.55
Localization (reference, oral cavity)		
Oropharynx	0.61 (0.26-1.42)	.25
Hypopharynx	0.75 (0.26-2.14)	.59
Larynx	1.36 (0.44-4.16)	.59
Oro-/Hypopharynx (multi-level)	0.40 (0.06-2.00)	.23
Clinical T stage (reference, cT1)		
T2	0.49 (0.11-2.19)	.35
T3	0.46 (0.12-1.75)	.26
T4	0.55 (0.16-1.83)	.33
Clinical N stage (reference, cN0)		
cN1	1.36 (0.33-5.62)	.67
cN2	2.05 (0.73-5.72)	.17
cN3	2.59 (0.48-14.10)	.27
HPV status (reference, HPV-positive)	2.16 (0.70-6.71)	.18
Year of treatment	0.94 (0.85-1.03)	.19
Cumulative cisplatin dose $\geq 200$ mg/m <sup>2</sup>	0.69 (0.35-1.35)	.28

**Supplementary table 8. Cox Proportional Hazard Regression Analysis for Overall Survival in Older Adults with Locally Advanced Head and Neck Squamous Cell Carcinoma Treated with Chemoradiation Between 2005 and 2019.** The prognostic value of the cumulative cisplatin dose (as continuous parameter) was analyzed. Multiple imputation was performed regarding missing values. CCI, Charlson Comorbidity Index; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; HPV, human papillomavirus; SHR, subhazard ratio.

Characteristic	HR (95% CI)	P
Age	1.059 (1.003-1.118)	.04
Sex (reference, female)	1.502 (0.970-2.326)	.07
ECOG status (reference, 0)		
1	1.839 (1.169-2.893)	.008
2	1.527 (0.669-3.483)	.31
3	2.484 (0.665-9.279)	.18
CCI	1.078 (0.970-1.197)	.16
Smoking (reference, never/limited smoking)	1.516 (0.971-2.365)	.07
Localization (reference, oral cavity)		
Oropharynx	0.506 (0.295-0.870)	.01
Hypopharynx	0.552 (0.299-1.018)	.06
Larynx	0.747 (0.388-1.441)	.38
Oro-/Hypopharynx (multi-level)	0.562 (0.198-1.595)	.28
Clinical T stage (reference, cT1)		
T2	0.787 (0.232-2.668)	.70
T3	1.425 (0.450-4.322)	.53
T4	1.978 (0.685-5.717)	.21
Clinical N stage (reference, cN0)		
cN1	1.579 (0.714-3.492)	.26
cN2	2.234 (1.268-3.936)	.005
cN3	2.000 (0.624-6.416)	.24
HPV status (reference, HPV-positive)	2.876 (1.315-6.289)	.008
Year of treatment	1.022 (0.957-1.092)	.51
Cumulative cisplatin dose	0.996 (0.993-0.999)	.009

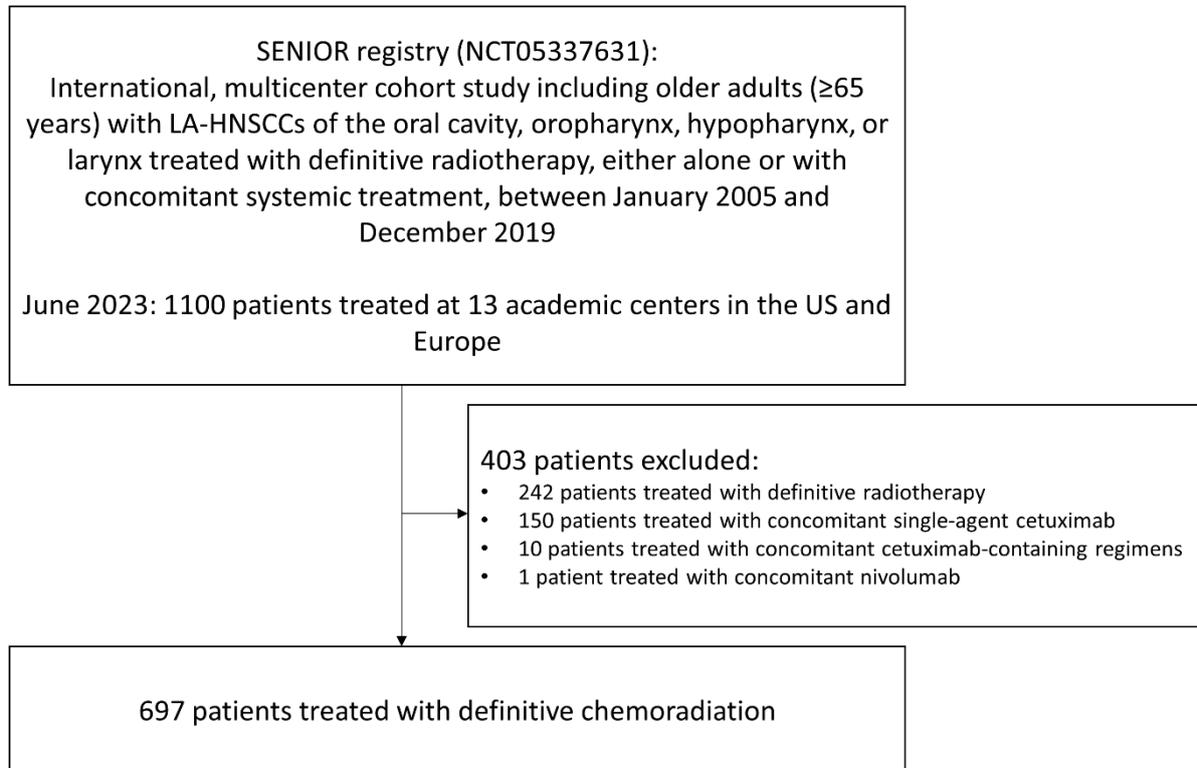
**Supplementary table 9. Fine-Gray Competing Risk Regression Analysis for Overall Survival in Older Adults with Locally Advanced Head and Neck Squamous Cell Carcinoma Treated with Chemoradiation Between 2005 and 2019.** The prognostic value of the cumulative cisplatin dose (as continuous parameter) was analyzed. Multiple imputation was performed regarding missing values. CCI, Charlson Comorbidity Index; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; HPV, human papillomavirus; HR, hazard ratio.

Characteristic	SHR (95% CI)	<i>p</i>
Age	0.974 (0.909-1.043)	.45
Sex (reference, female)	1.175 (0.608-2.270)	.63
ECOG status (reference, 0)		
1	1.453 (0.709-2.977)	.31
2	0.867 (0.176-4.278)	.86
3	5.405 (0.565-51.698)	.14
CCI	0.768 (0.600-0.984)	.04
Smoking (reference, never/limited smoking)	1.234 (0.602-2.529)	.57
Localization (reference, oral cavity)		
Oropharynx	0.624 (0.262-1.487)	.29
Hypopharynx	0.694 (0.242-1.991)	.50
Larynx	1.415 (0.463-4.327)	.54
Oro-/Hypopharynx (multi-level)	0.326 (0.067-1.581)	.16
Clinical T stage (reference, cT1)		
T2	0.457 (0.105-1.980)	.29
T3	0.446 (0.117-1.699)	.24
T4	2.480 (0.146-1.662)	.25
Clinical N stage (reference, cN0)		
cN1	1.443 (0.353-5.910)	.61
cN2	2.083 (0.753-5.761)	.16
cN3	2.480 (0.432-14.230)	.31
HPV status (reference, HPV-positive)	2.282 (0.707-7.368)	.17
Year of radiotherapy	0.938 (0.851-1.033)	.20
Cumulative cisplatin dose	0.995 (0.990-1.000)	.06

**Supplementary table 10. Comparison of Cumulative Cisplatin Dose Depending on the Cisplatin Administration Regimen.** Groups were compared using an Independent Samples Mann-Whitney U Test, as Cumulative Cisplatin Doses were not Normally Distributed According to the Shapiro-Wilk Test. SD, standard deviation.

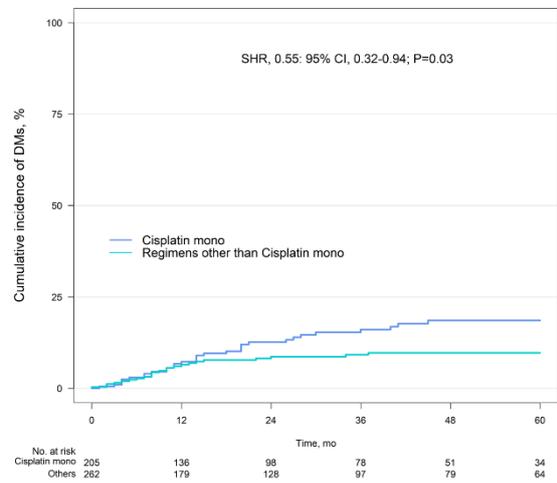
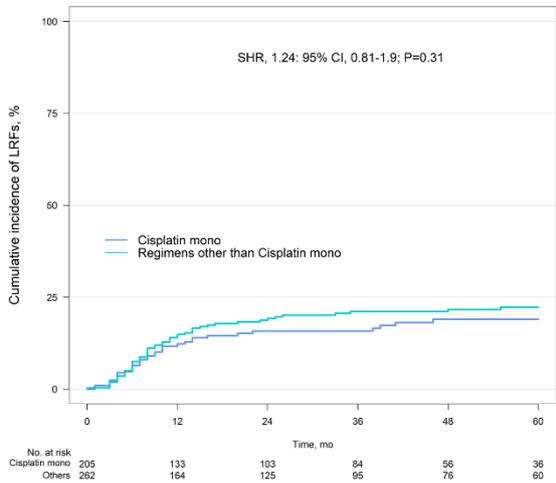
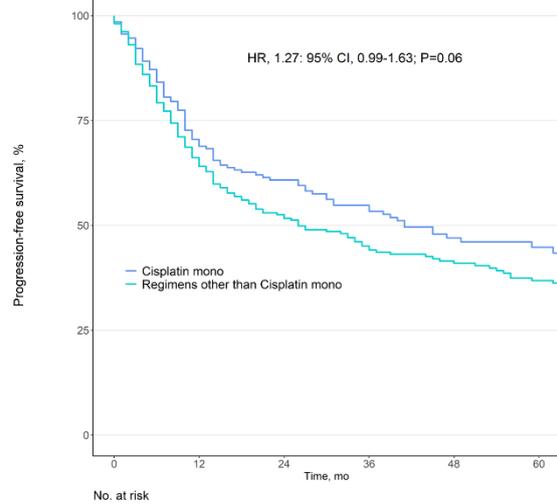
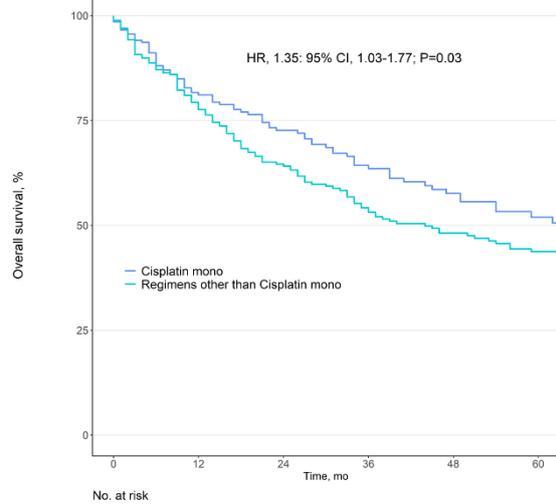
	<b>Median</b>	<b>Mean</b>	<b>SD</b>	<i>p</i>
Weekly cisplatin	180 mg/m <sup>2</sup>	182 mg/m <sup>2</sup>	73 mg/m <sup>2</sup>	
Other single-agent cisplatin regimens	200 mg/m <sup>2</sup>	172 mg/m <sup>2</sup>	59 mg/m <sup>2</sup>	.193

## Supplementary figure 1



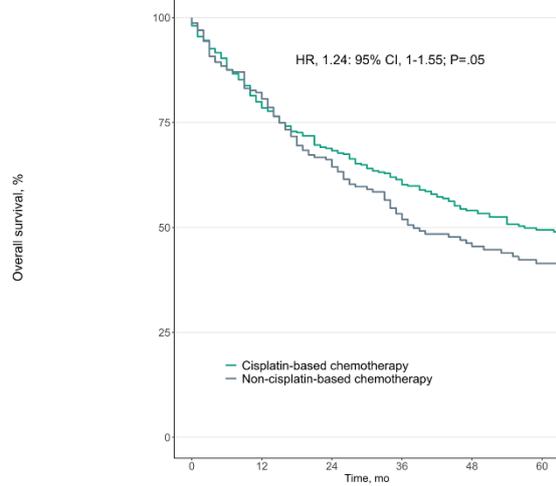
**Flow diagram of the study.** LA-HNSCC, locoregionally advanced head-and-neck squamous cell carcinoma.

## Supplementary figure 2

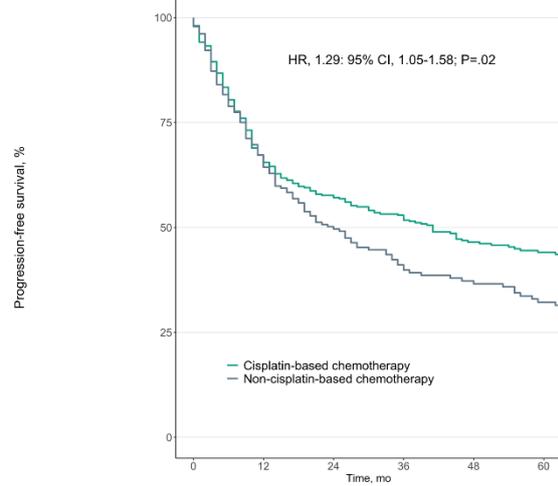


**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 70$  Years) Head and Neck Squamous Cell Carcinoma Patients Receiving Either Single-agent Cisplatin or Other Chemotherapy Regimens (Multi-agent Cisplatin Regimens, Carboplatin-Based Regimens, Mitomycin C-Based Regimens, etc.). Concomitantly to Definitive Radiotherapy.** HR, hazard ratio; SHR, subdistribution hazard ratio.

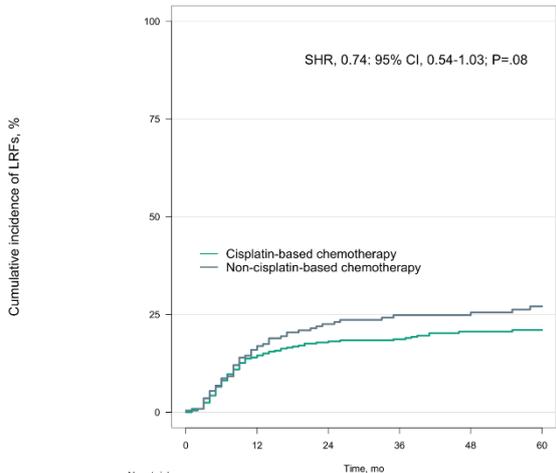
### Supplementary figure 3



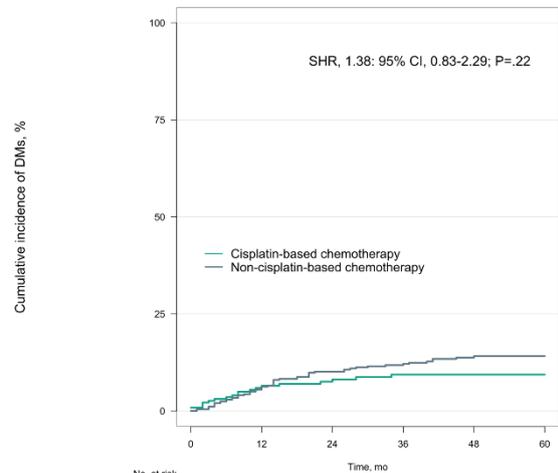
No. at risk	
Cisplatin-based chemotherapy	463 323 249 205 145 107
Non-cisplatin-based chemotherapy	234 163 115 80 61 49



No. at risk	
Cisplatin-based chemotherapy	463 275 213 181 130 99
Non-cisplatin-based chemotherapy	234 138 95 67 54 43



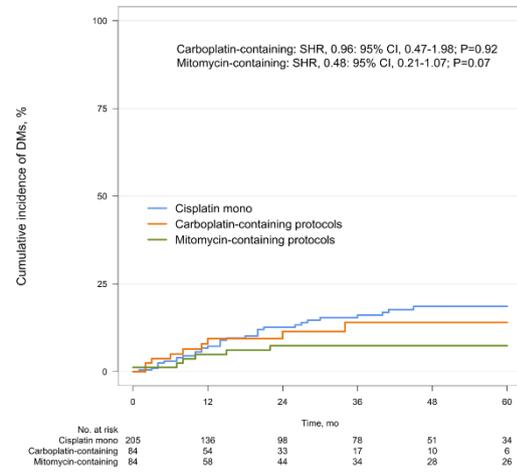
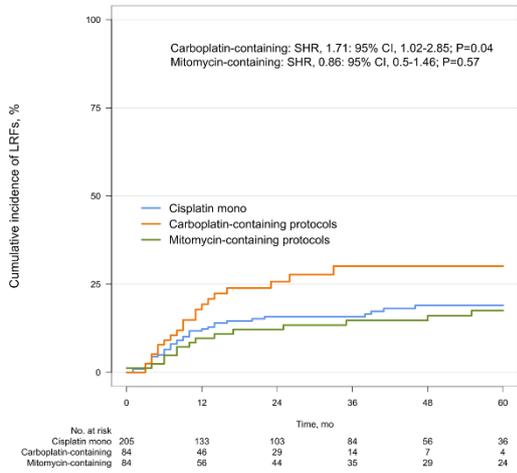
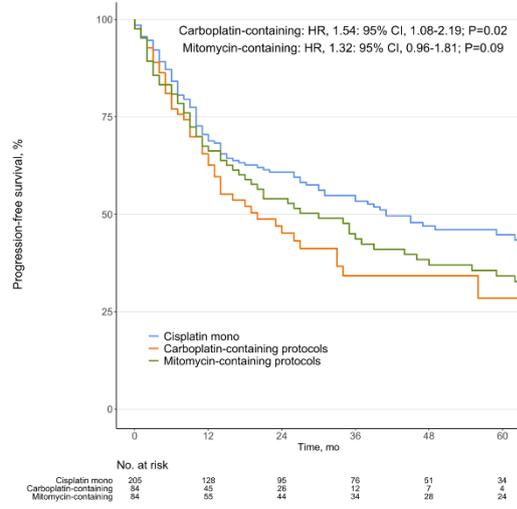
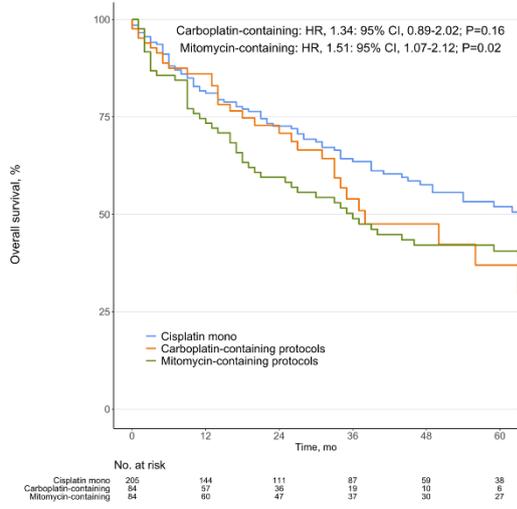
No. at risk	
Cisplatin-based chemotherapy	463 287 228 193 136 101
Non-cisplatin-based chemotherapy	234 140 98 71 55 43



No. at risk	
Non-cisplatin-based chemotherapy	234 157 109 74 58 48
Cisplatin-based chemotherapy	463 307 226 190 134 102

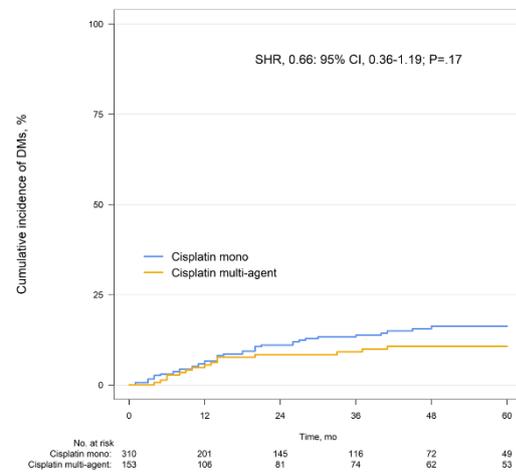
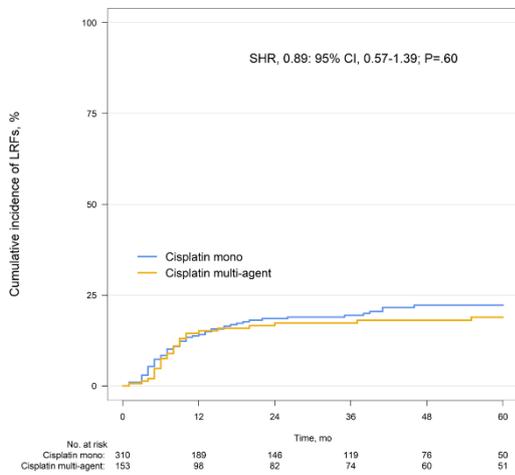
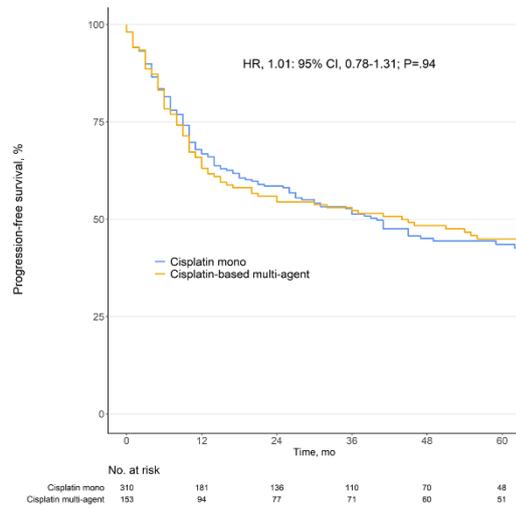
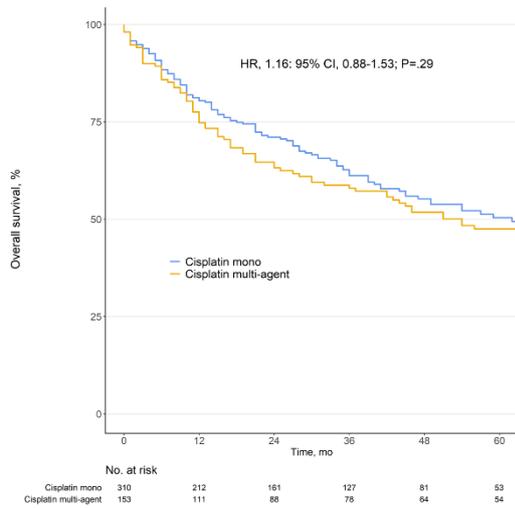
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 65$  Years) Head and Neck Squamous Cell Carcinoma Patients Receiving Either Cisplatin-Containing Regimens or Cisplatin-free Regimens Concomitantly to Definitive Radiotherapy. HR, hazard ratio; SHR, subdistribution hazard ratio.**

### Supplementary figure 4



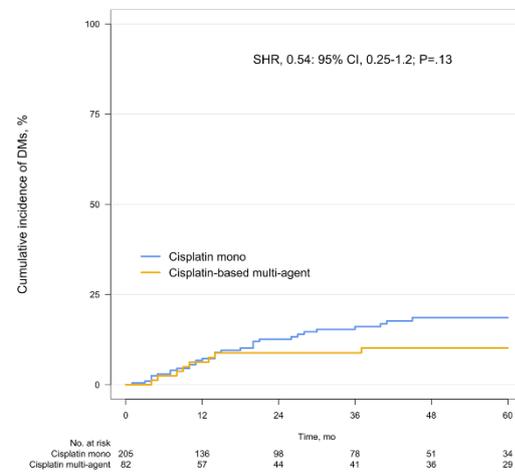
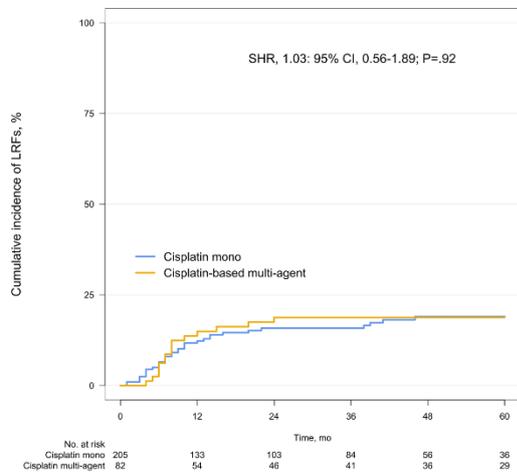
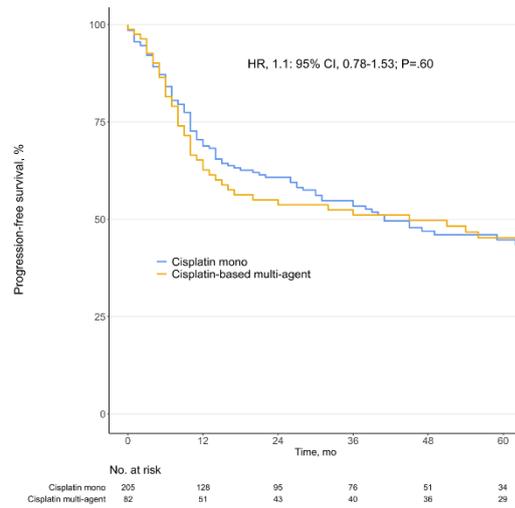
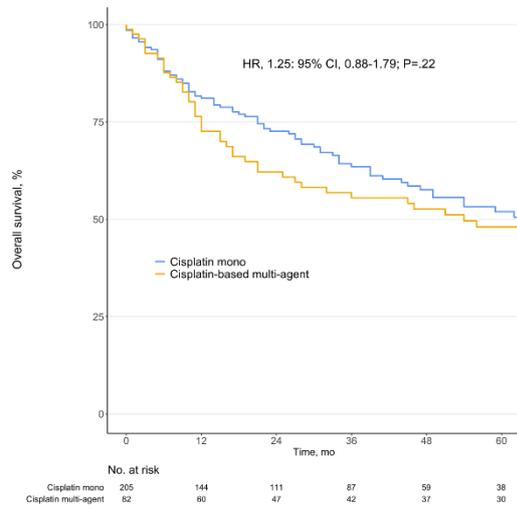
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 70$  Years) Head and Neck Squamous Cell Carcinoma Patients Depending on the Type of Concomitant Chemotherapy. HR, hazard ratio; SHR, subdistribution hazard ratio.**

## Supplementary figure 5



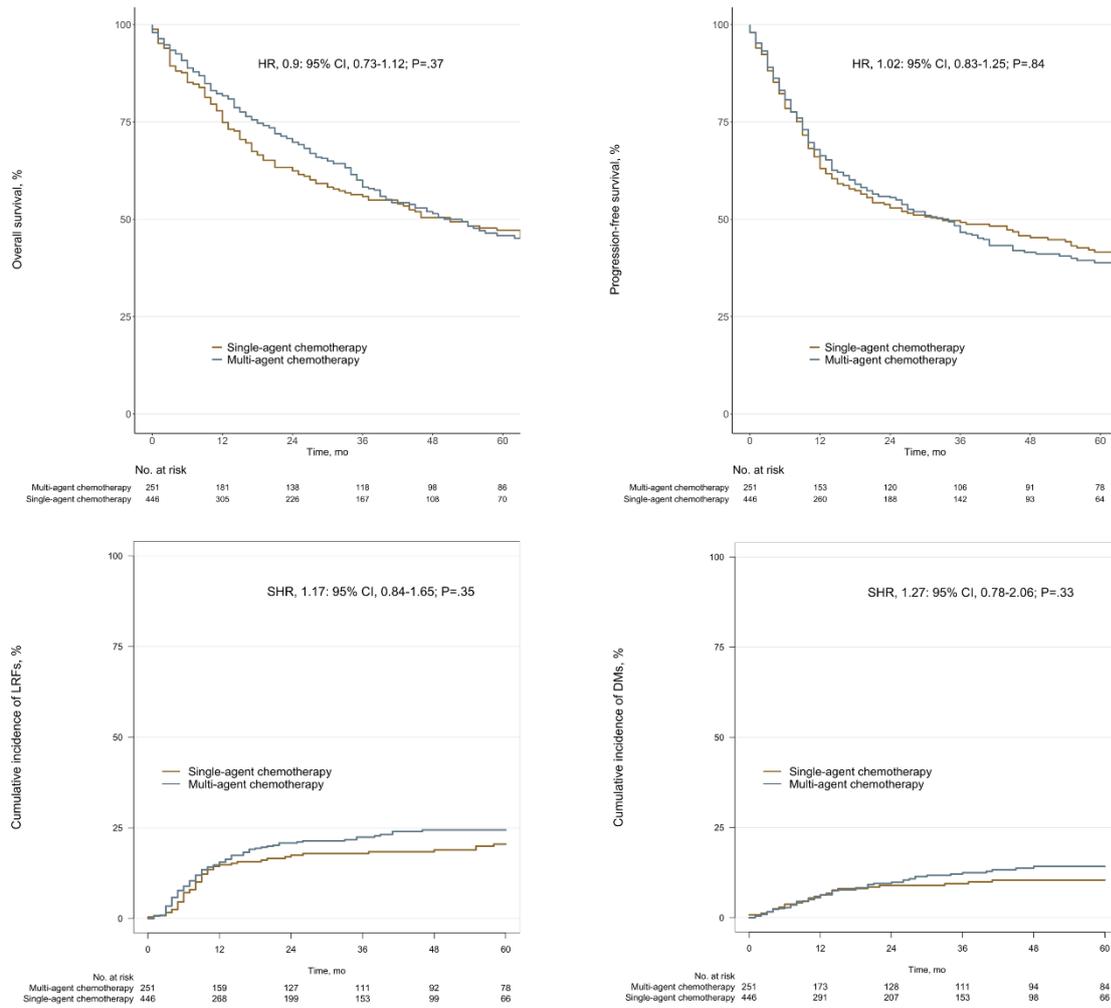
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 65$  Years) Head and Neck Squamous Cell Carcinoma Patients Receiving Either Cisplatin Mono or Cisplatin-based Multi-agent Chemotherapy Concomitantly to Radiotherapy. HR, hazard ratio; SHR, subdistribution hazard ratio.**

## Supplementary figure 6



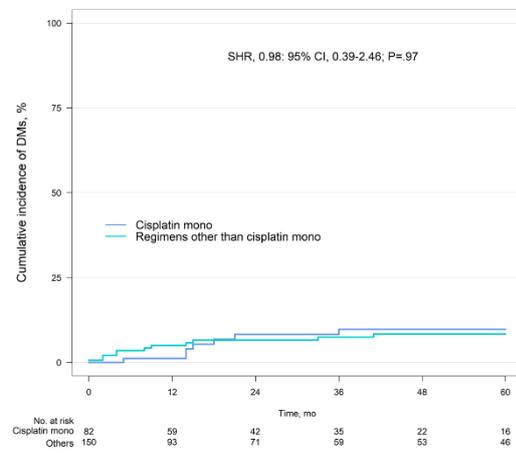
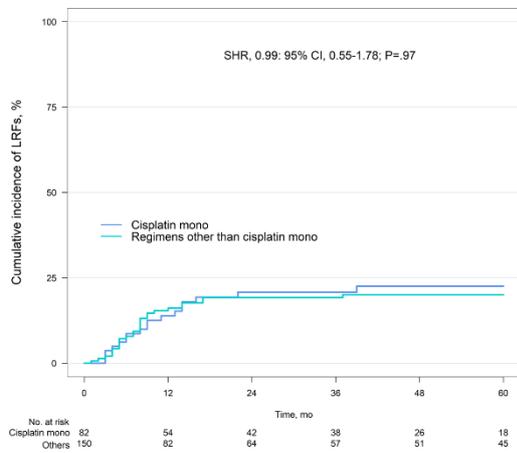
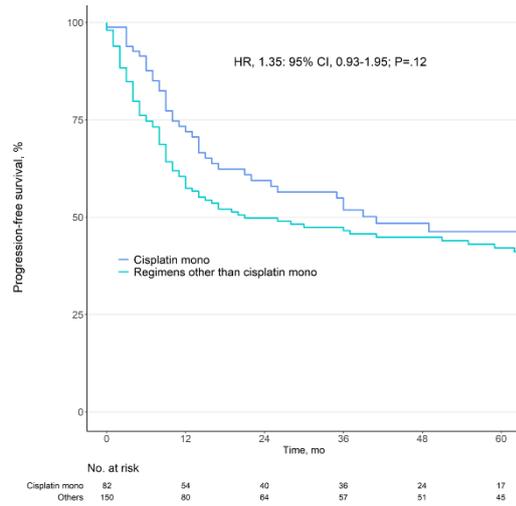
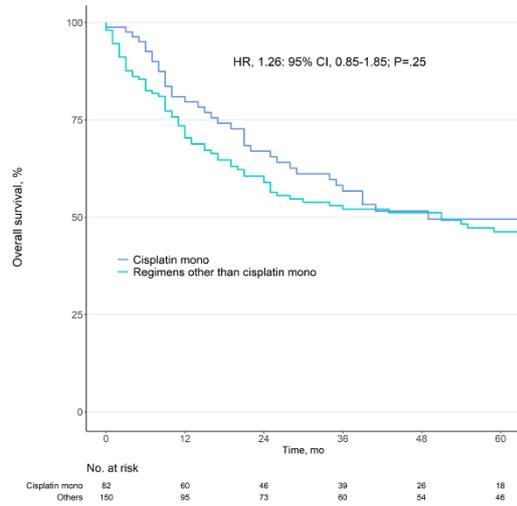
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 70$  Years) Head and Neck Squamous Cell Carcinoma Patients Receiving Either Cisplatin Mono or Cisplatin-based Multi-agent Chemotherapy Concomitantly to Radiotherapy. HR, hazard ratio; SHR, subdistribution hazard ratio.**

## Supplementary figure 7



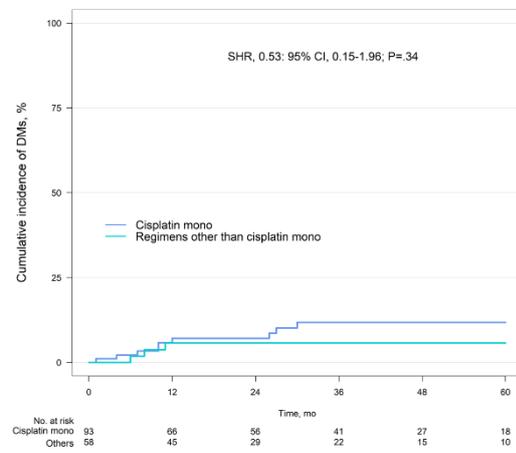
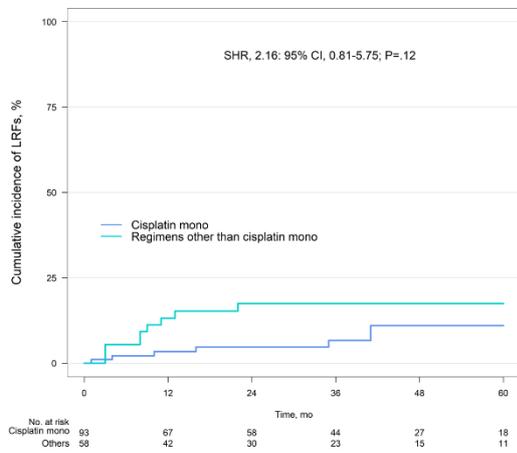
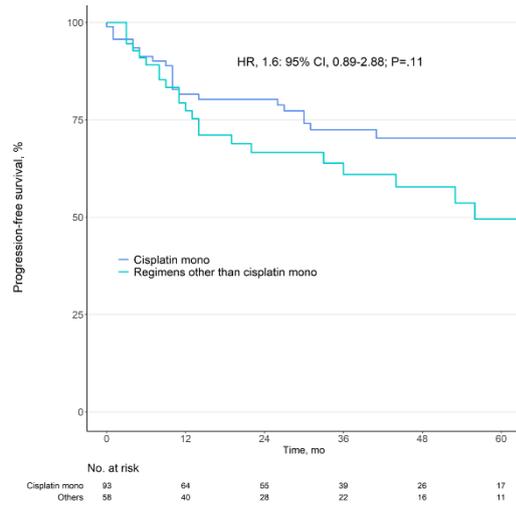
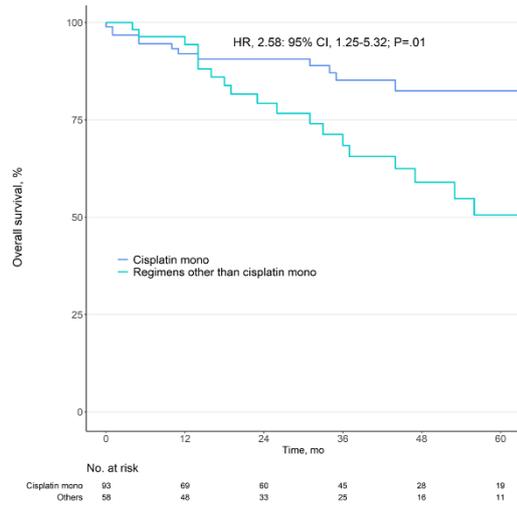
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 65$  Years) Head and Neck Squamous Cell Carcinoma Patients Receiving Either Single-Agent Chemotherapy or Multi-Agent Chemotherapy Concomitantly to Radiotherapy.** HR, hazard ratio; SHR, subdistribution hazard ratio.

## Supplementary figure 8



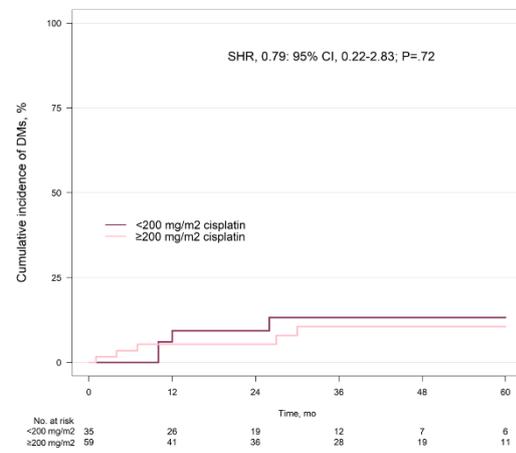
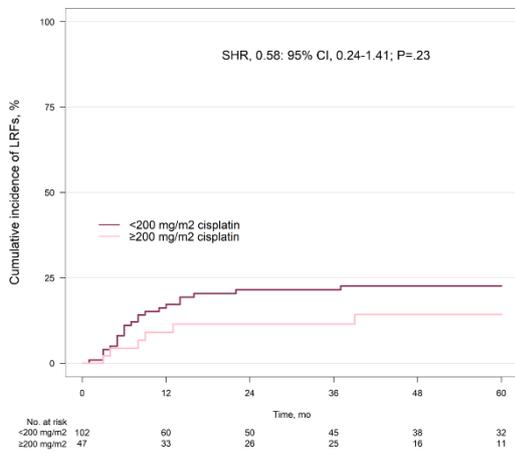
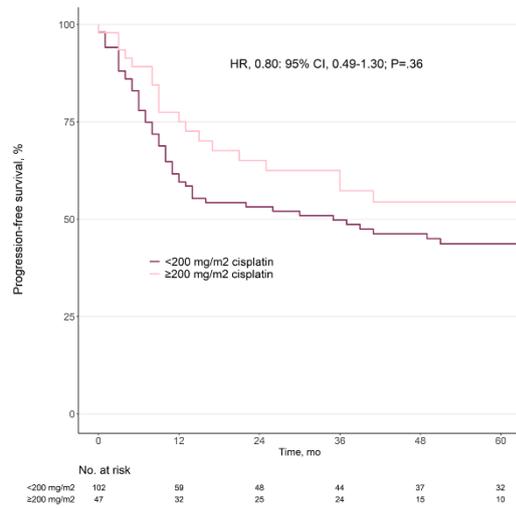
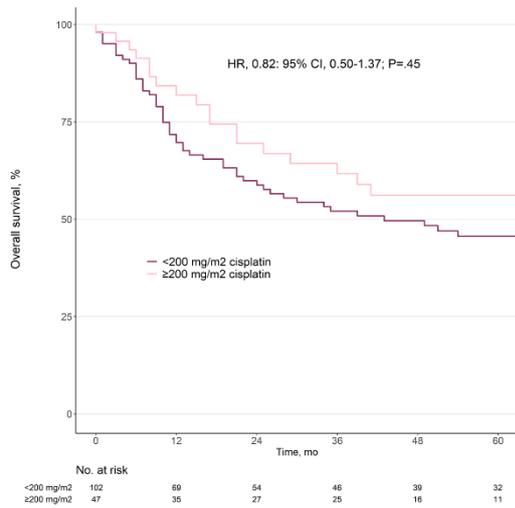
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 65$  Years) Human Papillomavirus-Negative Oropharyngeal Squamous Cell Carcinoma Patients Receiving Either Single-agent Cisplatin or Other Chemotherapy Regimens (Multi-agent Cisplatin Regimens, Carboplatin-Based Regimens, Mitomycin C-Based Regimens, etc.) Concomitantly to Definitive Radiotherapy.** HR, hazard ratio; SHR, subdistribution hazard ratio.

## Supplementary figure 9



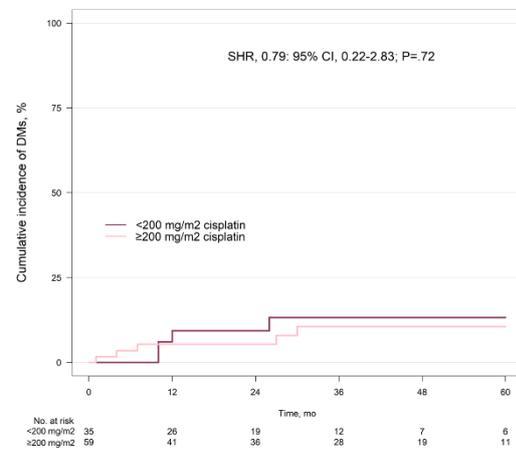
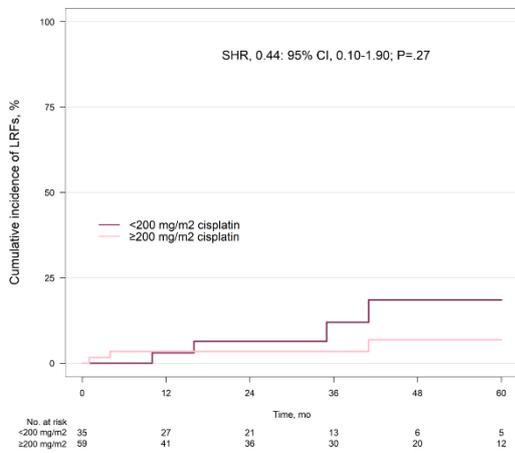
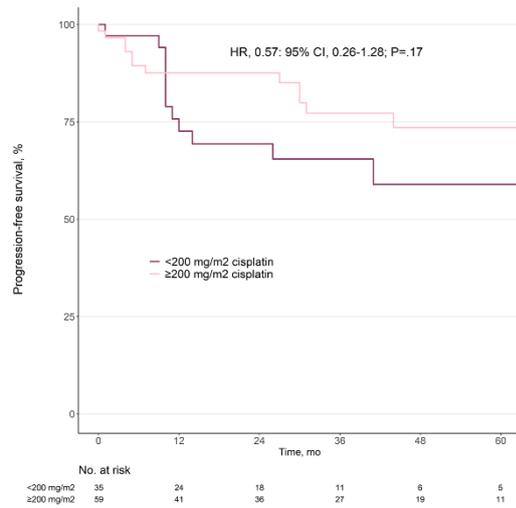
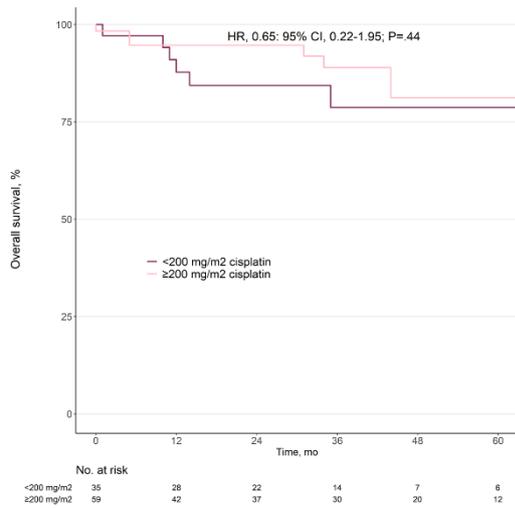
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 65$  Years) Human Papillomavirus-Positive Oropharyngeal Squamous Cell Carcinoma Patients Receiving Either Single-agent Cisplatin or Other Chemotherapy Regimens (Multi-agent Cisplatin Regimens, Carboplatin-Based Regimens, Mitomycin C-Based Regimens, etc.). Concomitantly to Definitive Radiotherapy.** HR, hazard ratio; SHR, subdistribution hazard ratio.

## Supplementary figure 10



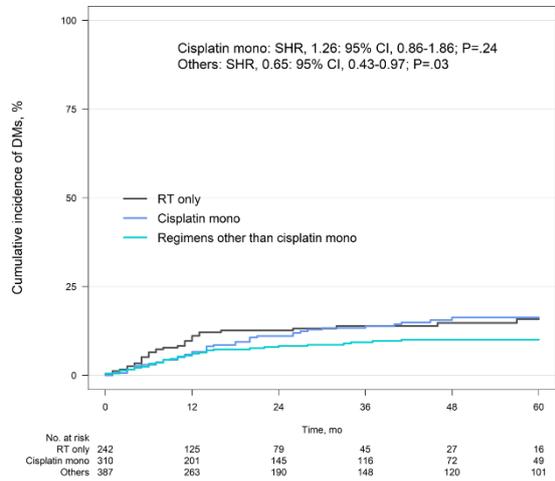
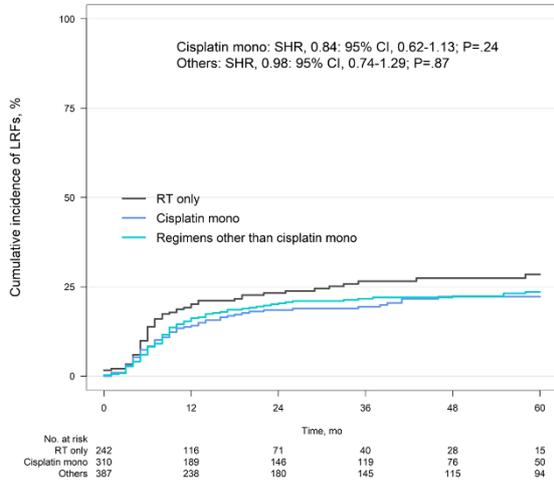
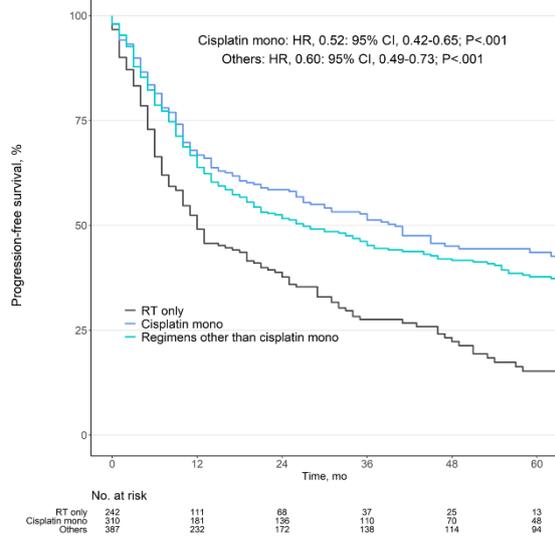
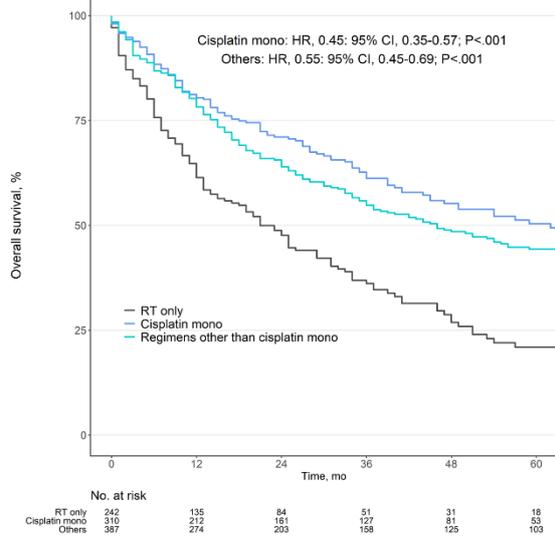
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older (≥65 Years) Human Papillomavirus-Negative Oropharyngeal Squamous Cell Carcinoma Depending on the Cumulative Cisplatin Dose Administered During Chemoradiation.** HR, hazard ratio; SHR, subdistribution hazard ratio.

## Supplementary figure 11



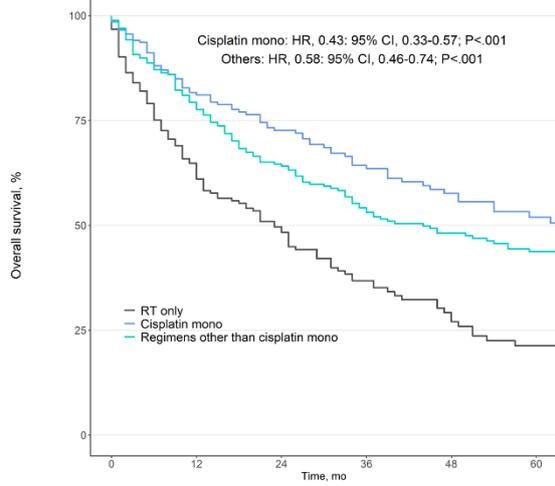
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older (≥65 Years) Human Papillomavirus-Positive Oropharyngeal Squamous Cell Carcinoma Depending on the Cumulative Cisplatin Dose Administered During Chemoradiation.** HR, hazard ratio; SHR, subdistribution hazard ratio.

## Supplementary figure 12

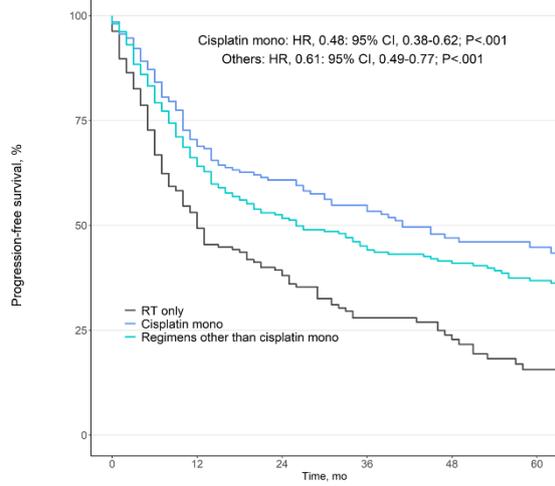


**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 65$  Years) Head and Neck Squamous Cell Carcinoma Patients Receiving Either Radiotherapy Alone or Chemoradiation With Either Single-agent Cisplatin or With Other Chemotherapy Regimens (Multi-agent Cisplatin Regimens, Carboplatin-Based Regimens, Mitomycin C-Based Regimens, etc.).** HR, hazard ratio; RT, radiotherapy; SHR, subdistribution hazard ratio.

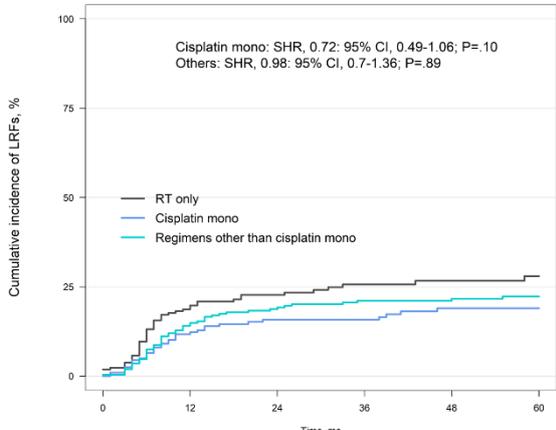
### Supplementary figure 13



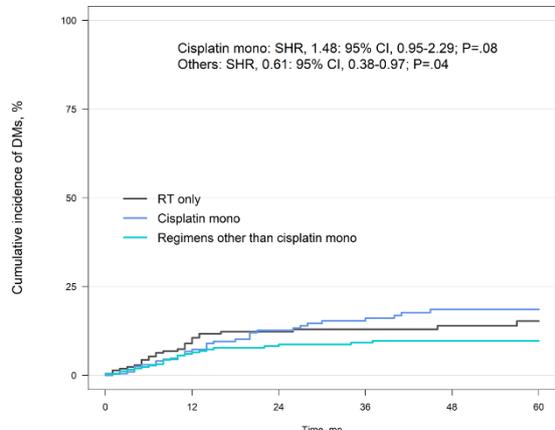
No. at risk		0	12	24	36	48	60
RT only	214	120	75	45	27	15	
Cisplatin mono	205	144	111	87	59	38	
Others	282	187	137	103	82	68	



No. at risk		0	12	24	36	48	60
RT only	214	99	60	33	22	11	
Cisplatin mono	205	128	95	76	51	34	
Others	282	159	119	91	78	60	



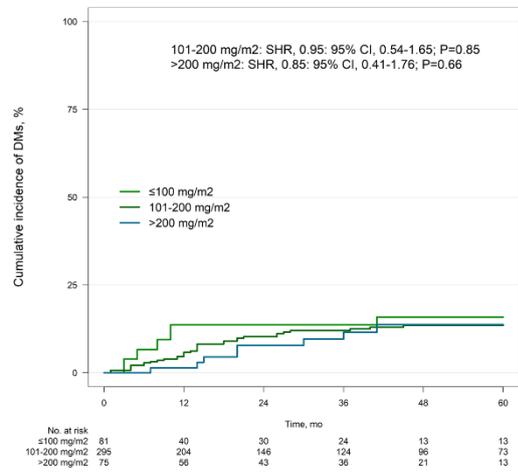
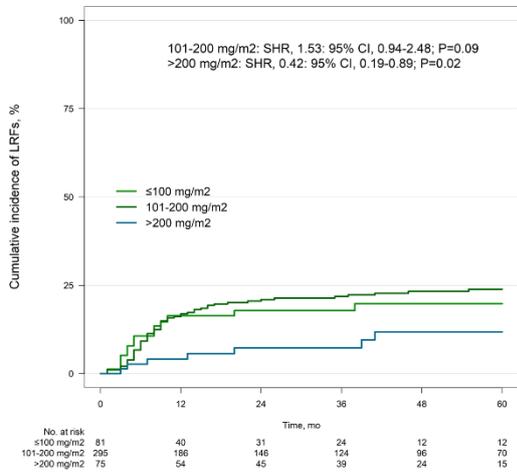
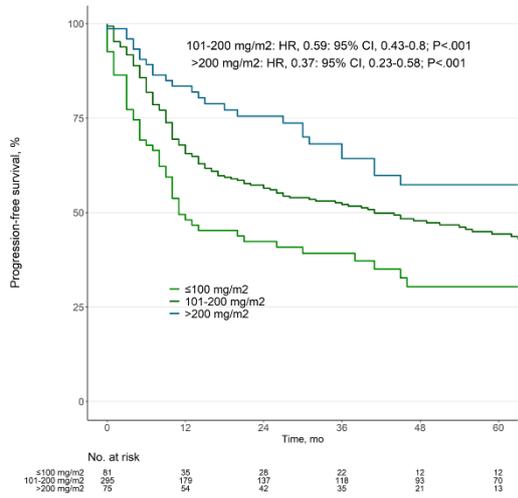
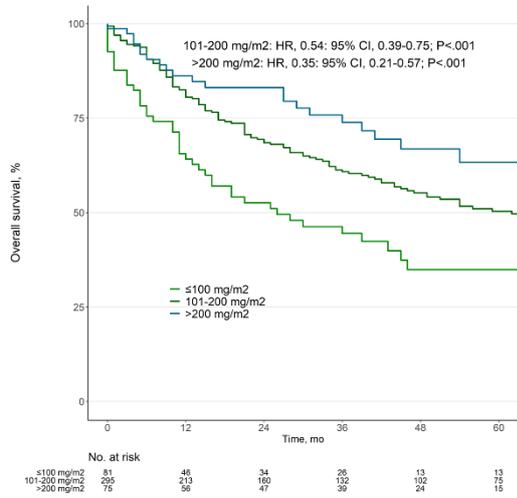
No. at risk		0	12	24	36	48	60
RT only	214	103	63	35	24	12	
Cisplatin mono	205	133	103	84	56	36	
Others	282	164	125	95	76	60	



No. at risk		0	12	24	36	48	60
RT only	214	111	70	40	24	14	
Cisplatin mono	205	136	98	78	51	34	
Others	282	179	128	97	79	64	

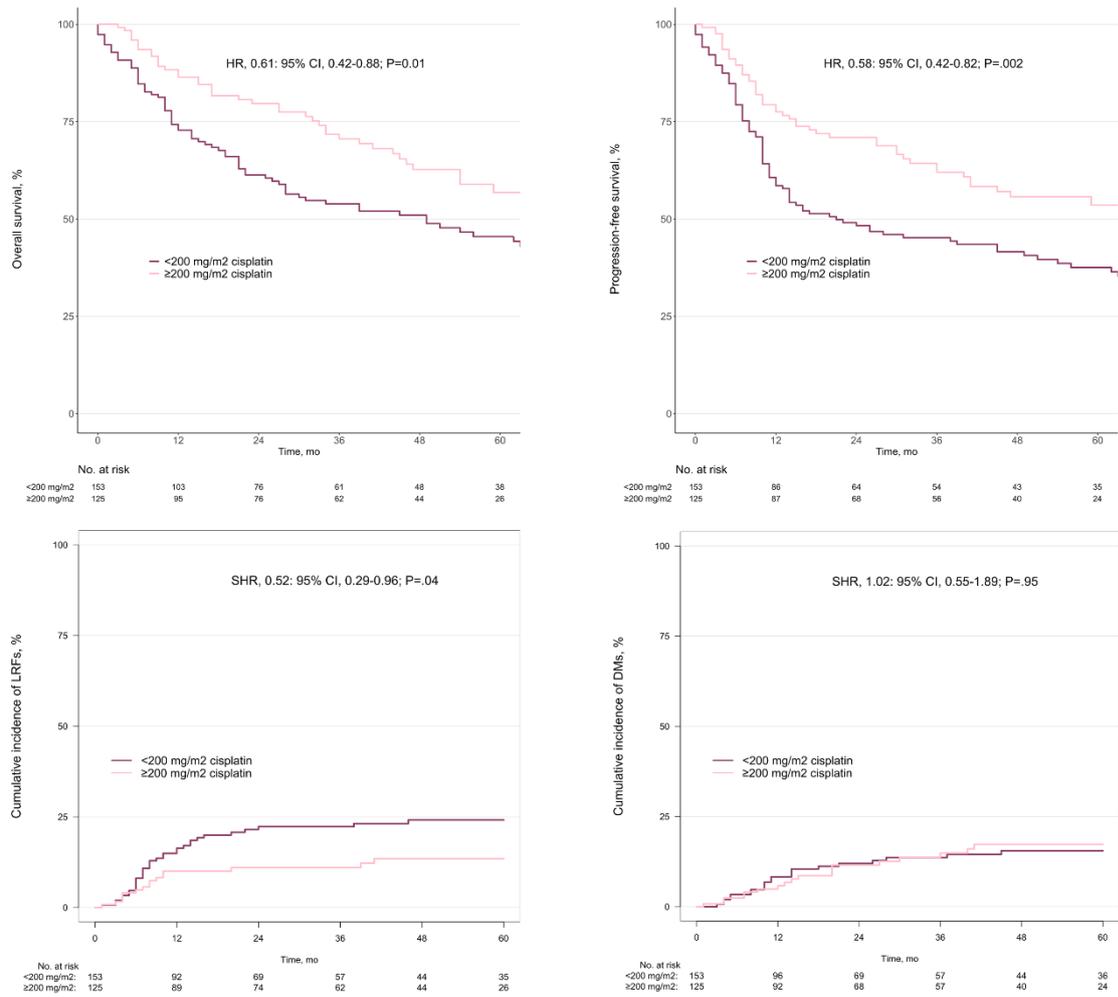
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 70$  Years) Head and Neck Squamous Cell Carcinoma Patients Receiving Either Radiotherapy Alone or Chemoradiation With Either Single-agent Cisplatin or With Other Chemotherapy Regimens (Multi-agent Cisplatin Regimens, Carboplatin-Based Regimens, Mitomycin C-Based Regimens, etc.).** HR, hazard ratio; RT, radiotherapy; SHR, subdistribution hazard ratio.

### Supplementary figure 14



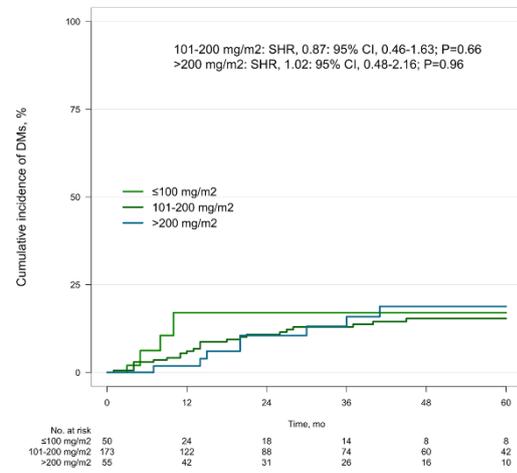
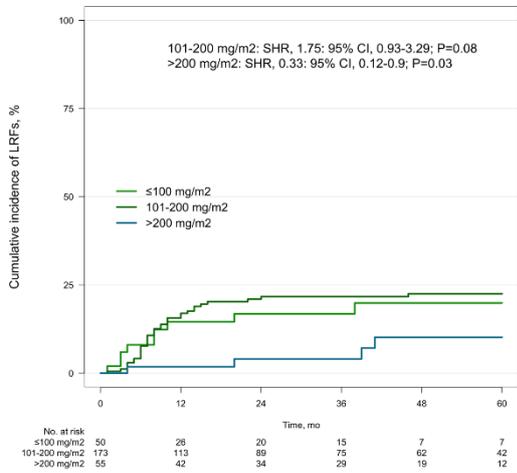
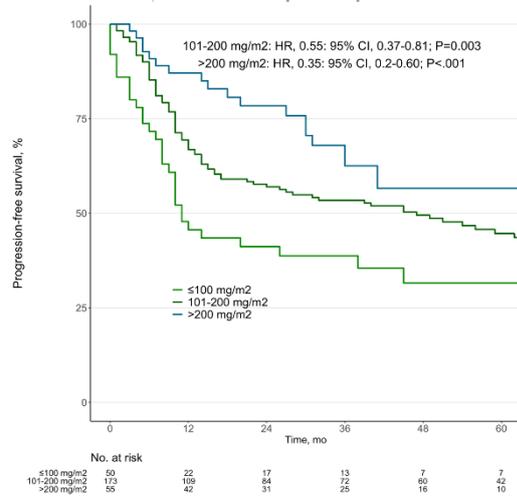
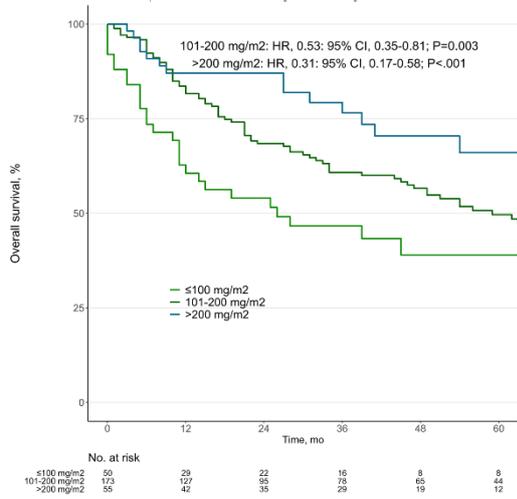
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older (≥65 Years) Head and Neck Squamous Cell Carcinoma Patients Depending on Cumulative Cisplatin Dose During Chemoradiation. HR, hazard ratio; SHR, subdistribution hazard ratio.**

## Supplementary figure 15



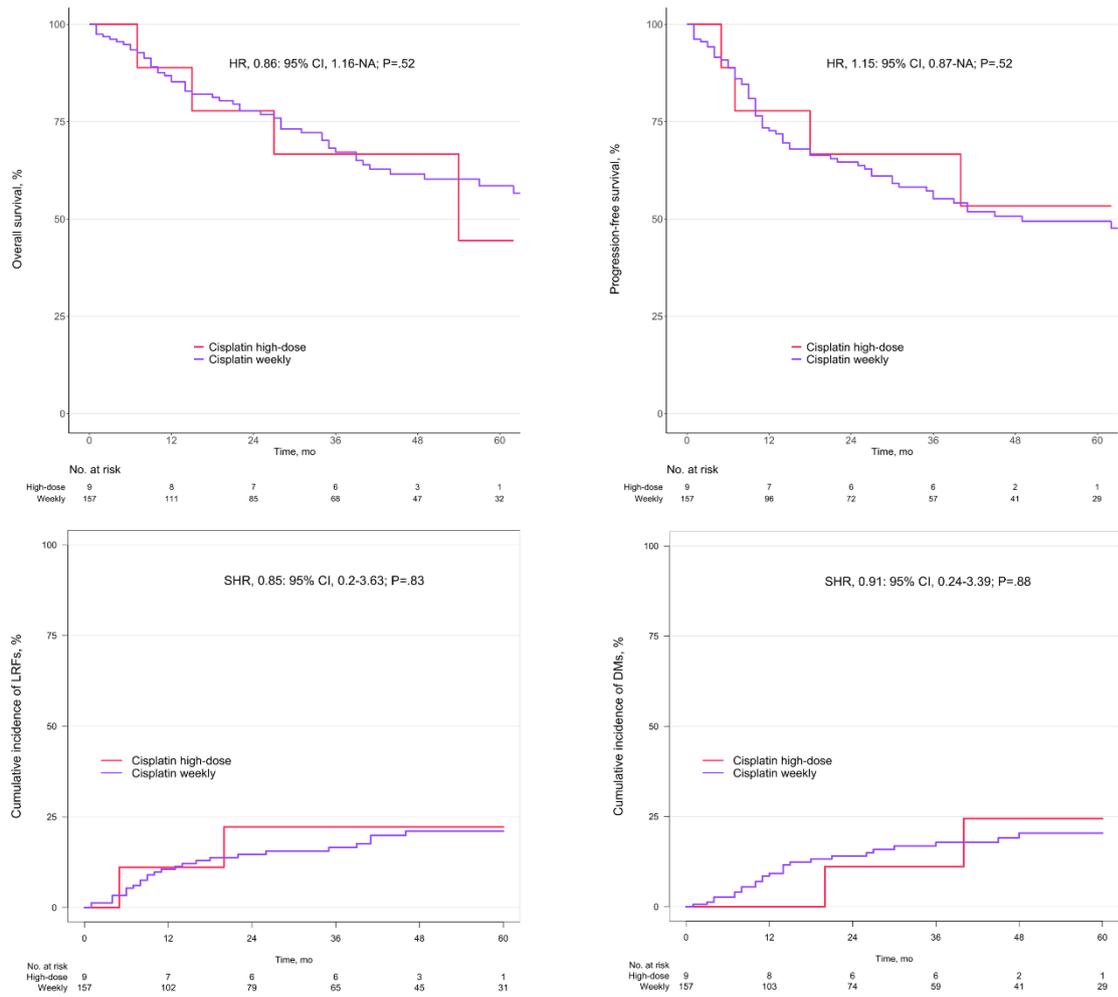
**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older (≥70 Years) Head and Neck Squamous Cell Carcinoma Patients Depending on Cumulative Cisplatin Dose During Chemoradiation. HR, hazard ratio; SHR, subdistribution hazard ratio.**

### Supplementary figure 16



**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older (≥70 Years) Head and Neck Squamous Cell Carcinoma Patients Depending on Cumulative Cisplatin Dose During Chemoradiation. HR, hazard ratio; SHR, subdistribution hazard ratio.**

## Supplementary figure 17



**Overall Survival, Progression-Free Survival, Incidence of Locoregional Failures, and Incidence of Distant Metastases of Older ( $\geq 65$  Years) Head and Neck Squamous Cell Carcinoma Patients With Either Weekly Cisplatin Administration or Three-Weekly High-Dose Cisplatin Administration During Chemoradiation.**  
HR, hazard ratio; SHR, subdistribution hazard ratio.