

Supplementary Table 1. Hospital stay according to reconstruction type

Reconstruction type	Length of hospital stay (day)		P-value
	Group 1	Group 2	
Total ^{a)}	21.0±1.2 (9–96)	15.0±1.1 (9–44)	<0.001
Soft tissue reconstruction ^{b)}	20.0±1.2 (9–76)	15.0±1.2 (9–44)	<0.001
Bony reconstruction ^{c)}	21.5±4.7 (12–96)	15.0±0.9 (13–16)	<0.001

Values are presented as median±standard error (range).

Group 1, patients without active management of LOS; Group 2, patients under a 14-day LOS program; LOS, length of in-hospital stay.

^{a)}n=125 vs. 43, ^{b)}n=107 vs. 40, ^{c)}n=18 vs. 3.

Supplementary Table 2. Pathological diagnosis in the two groups

Pathology	Group 1 (n=125)	Group 2 (n=43)	P-value
Squamous cell carcinoma	109 (87.2)	29 (67.4)	0.004
Adenoid cystic carcinoma	4 (3.2)	3 (6.9)	
Adenocarcinoma	0	1 (2.3)	
Mucoepidermoid carcinoma	3 (2.4)	0	
Salivary duct carcinoma	2 (1.6)	0	
Malignant melanoma	2 (1.6)	1 (2.3)	
Sarcoma	4 (3.2)	5 (11.6)	
Others ^{a)}	1 (0.8)	4 (9.3)	

Values are presented as number (%).

Group 1, patients without active management of LOS; Group 2, patients under a 14-day LOS program; LOS, length of in-hospital stay.

^{a)}Sebaceous carcinomas, giant cell tumors, hyalinizing clear cell carcinoma and trichilemmal carcinoma.

Supplementary Table 3. Postoperative adjuvant treatments

Adjuvant treatment	Group 1 (n=125)	Group 2 (n=43)	P-value
Modality			0.034
None	38 (30.4)	12 (27.9)	
RT	39 (31.2)	22 (51.2)	
CRT	47 (37.6)	8 (18.6)	
Chemotherapy alone	1 (0.8)	1 (2.3)	
RT dose (cGy)			
RT	6,031.5±402.1	5,810.0±647.7	0.623
CRT	5,892.7±900.5	5,921.4±634.2	0.490
Chemo-regimen			0.293
Cisplatin	47	8	
Others	1	1	
Time interval between surgery and postoperative treatment (day)	38.1±1.2	38.1±2.1	0.90

Values are presented as number (%) or mean±standard deviation.

Group 1, patients without active management of LOS; Group 2, patients under a 14-day LOS program; RT, radiation; CRT, chemo-radiation; LOS, length of in-hospital stay.

Supplementary Table 4. Comparison of two groups with radial forearm and anterolateral thigh free flap reconstruction

Variable	Group 1 (n=103)	Group 2 (n=38)	P-value
Reconstruction			0.047
Anterolateral thigh	69 (67.0)	18 (47.4)	
Radial forearm	34 (33.0)	20 (52.6)	
Length of hospital stay (day), median±SE (range)			
Total	20.7±1.2 (9–73)	15.0±1.2 (9–44)	<0.001
Anterolateral thigh	22.0±1.4 (12–73) ^{a)}	14.5±2.3 (10–44) ^{b)}	0.036
Radial forearm	15.5±1.5 (9–52) ^{c)}	14.0±1.0 (9–26) ^{d)}	0.044
Age (yr), median±SD (range)	56.0±12.82 (23–86)	56.0±13.32 (25–77)	0.854
Sex (male:female)	69:34 (67.0:33.0)	30:8 (78.9:21.1)	0.214
Patient physical status (ASA 1:2:3)	25:70:7	9:26:3	0.861
Primary site			0.150
Oral cavity & oropharynx	83 (80.6)	28 (73.7)	
Larynx & hypopharynx	5 (4.9)	0	
Nasal cavity & paranasal sinus	8 (7.8)	3 (7.9)	
Others	7 (6.8)	7 (18.4)	
pTNM stage			
T status (T1:T2:T3:T4)	15:44:14:30	6:15:6:11	0.263
N status (N0:N1:N2:N3)	56:10:36:1	22:7:9:0	0.468
M status (M0:M1)	102:1	37:1	0.448
Complication			
Surgical complication	44 (42.7)	14 (36.8)	0.909
Transposed flap complication	17	7	
Flap fail & revision	3	2	
Partial necrosis & congestion	9	3	
Flap dehiscence	5	2	
Flap donor site complications	5	2	
Neck wound problems	15	3	
Fistula	2	0	
Others	5	2	
Medical complication	12 (11.7)	3 (7.8)	0.670
Oncological outcome			
Recurrence			
Local	15 (85.4)	7 (18.4)	0.575
Regional	9 (8.7)	5 (13.2)	0.605
Distant	9 (8.7)	4 (10.5)	0.748
Residual disease	6 (5.8)	1 (2.6)	0.674
Cancer related death	10 (9.7)	1 (2.6)	0.288
Diagnosis of second cancer	20 (19.4)	7 (18.4)	0.894

Values are presented as number (%) unless otherwise indicated.

Group 1, patients without active management of LOS; Group 2, patients under a 14-day LOS program; SE, standard error; SD, standard deviation; ASA, American Society of Anesthesiologists Physical Status Classification; pTNM, pathological TNM; LOS, length of in-hospital stay.

^{a)} vs. ^{c)}, *P*=0.003. ^{b)} vs. ^{d)}, *P*=0.054.

Supplementary Table 5. Medical costs of hospital stay for each group

Variable	Group 1 (n=125)	Group 2 (n=43, reference)	P-value
Distribution of patients according to health coverage systems			
Medical insurance	118	41	0.584
Medicaid	2	2	0.271
Non	5	0	
Relative medical cost of stay (total)	1.39 (1.46–1.31)	1 (Reference)	<0.001
Patients under national medical insurance	1.37 (1.44–1.31)	1 (Reference)	<0.001
Patients under national Medicaid	0.90 (1.32–0.47)	1 (Reference)	0.667

Values are presented as relative mean (95% confidence interval).

Group 1, patients without active management of LOS; Group 2, patients under a 14-day LOS program; LOS, length of in-hospital stay.