

## ON-LINE APPENDIX

### Inclusion and Exclusion Criteria for the Pretreatment and Palliative Groups

Inclusion criteria for the pretreatment group were staging of disease according to the American Joint Committee on Cancer criteria, no evidence of distant metastasis, white blood cell count, >3500; platelet count, >10,000; creatinine clearance, >60; bilirubin level, <1.5; age older than 18 years. Patients with prior head and neck malignancy, history of head or neck irradiation, prior chemotherapy, medical contraindication to chemotherapy, surgery, or radiation therapy, and/or a positive pregnancy test were excluded from the pretreatment group.

Inclusion criteria for the palliative group included histologically or cytologically confirmed diagnosis of stage IVc (meta-

static) or locally recurrent advanced head and neck squamous cell carcinoma not amenable to surgery or palliative radiotherapy; no more than 2 prior systemic chemotherapeutic regimens for head and neck squamous cell carcinoma in the locally advanced or metastatic setting and having relapsed after or have been refractory to therapy; serum creatinine level,  $\leq 2.0$  times the upper limit of normal; serum albumin level,  $\geq 3.0$  g/dL; total bilirubin level,  $\leq 1.0$  times the upper limit of normal; and serum aspartate aminotransferase and serum alanine aminotransferase levels  $\leq 2.5$  times the upper limit of normal for the testing laboratory. Exclusion criteria for the palliative group included pregnant or nursing women, prior docetaxel treatment for head and neck squamous cell carcinoma in the metastatic setting, any concurrent therapy intended to treat head and neck squamous cell carcinoma, and active secondary malignancy or history of other malignancy within the past 5 years.

**On-line Table 1: Summary of patient demographics and laboratory testing results**

Patient No.	p16	EGFR	HPV	Age (yr)	Sex	Tumor Site	Stage
Pretreatment							
1	Negative	Positive	Negative	53	F	Tongue base	T4n2c
2	Positive	Negative	Positive	46	M	Left tonsil	T3N2b
3	Positive	Positive	Positive	63	M	Tongue base	T1N2c
4	—	—	Negative	46	F	Left false vocal cord	T3N2b
5	Negative	Positive	Negative	72	F	Left tongue base	T4N2c
6	—	—	Negative	67	M	False vocal fold	T4N2b
7	—	—	Negative	63	M	Epiglottis	T3N3
8	Positive	Positive	Positive	53	M	Right tongue base	T2N1
9	Negative	Negative	Negative	55	M	Right tonsil	T4N2b
10	Negative	Positive	Negative	80	F	Right lateral tongue	T3N0
11	Positive	Positive	Positive	55	M	Left tongue base	T2N2a
12	Negative	Negative	Negative	50	F	Epiglottis	T3N0
13	Negative	Positive	Negative	57	F	Left tonsil	T2N2a
14	—	—	Negative	78	F	Vallecula	T3N1
15	Negative	Positive	Negative	40	M	Left buccal mucosa	T3N0
16	Negative	Positive	Negative	66	M	Glottis	T3N0
17	Negative	Negative	Negative	54	M	Nasopharynx	T4bN2b
18	Negative	Positive	Negative	67	M	Left retromolar trigone	T4N1
Palliative							
19	Negative	Positive	Negative	57	M	Left lateral tongue recurrence	
20	Negative	—	Negative	62	M	Right neck nodal disease	
21	Negative	Negative	Negative	73	F	Peristomal recurrence	
22	Negative	Positive	Negative	68	M	Right parotid gland	
23	Negative	Positive	Negative	54	M	Peristomal recurrence	
24	Positive	Positive	Positive	46	M	Right masticator space metastasis	
25	Negative	Positive	Negative	41	M	Left floor of mouth recurrence	

**Note:**— indicates not tested due to insufficient sample or tissue quantity.

**On-line Table 2: CTP values of patients**

Patient No.	BF (mL/100 g/min)	BF ± SD	BV (mL/100 g)	BV ± SD	MTT (sec)	MTT ± SD	CP (mL/100 g/min)	CP ± SD
Pretreatment								
1	75.59	52.06	4.28	2.21	4.76	3.55	15.35	6.77
2	108.17	130	7.31	4.15	12.58	13.16	27.16	18.91
3	183.65	140.87	12.07	8.83	7.4	8.71	29.96	24.03
4	112.67	84.67	5.49	3.53	6.58	8.42	16.03	13.66
5	54.52	30.93	2.95	1.01	4.4	2.73	12.87	3.03
6	90	80.48	9.61	5.25	10.34	7.98	25.77	25.71
7	113.71	98.97	10.35	5.74	9.14	8.19	19.77	19.02
8	77.93	45.69	5.08	1.97	5.11	3.27	13.4	6.76
9	76.1	68.85	5.14	2.8	7.04	6.31	19.05	8.89
10	78.13	41.79	9.11	3.81	8.62	4.27	13.1	12.23
11	168.24	102.52	8.21	4.25	4	3.25	23.58	20.3
12	190.15	69.06	9.1	4.1	3.83	3.73	18.18	13.17
13	190.78	101.98	6.59	3.81	2.42	1.53	17.23	10.76
14	112.57	133.74	10.62	6.31	11.47	9.5	28	20.12
15	108.54	135.29	5.37	4.18	5.48	5.54	10.42	8.94
16	361.04	294.82	24.15	15.94	6.47	6.1	9.76	25.04
17	60.684	25.9	6.593	2.45	8.142	4.48	42.282	26.99
18	72.539	38.154	9.5332	5.13	9.2703	3.83	16.729	3.83
Palliative								
19	84.757	55.17	8.408	6.89	6.137	2.35	32.724	24.32
20	4.917	3.22	0.694	0.42	9.38	3.74	1.13	1.84
21	91.69	41.84	8.69	3.93	7.35	4.29	79.84	19.2
22	61.08	12.68	8.01	1.86	8.57	2.26	63.1	17.99
23	14.78	3.55	103.71	28.75	9.71	3.91	61.21	22.9
24	69.22	26.16	8.55	4.57	8.1	4.54	58	24.57
25	29.86	17.85	5.08	2.97	13.81	9.29	29.43	20.74