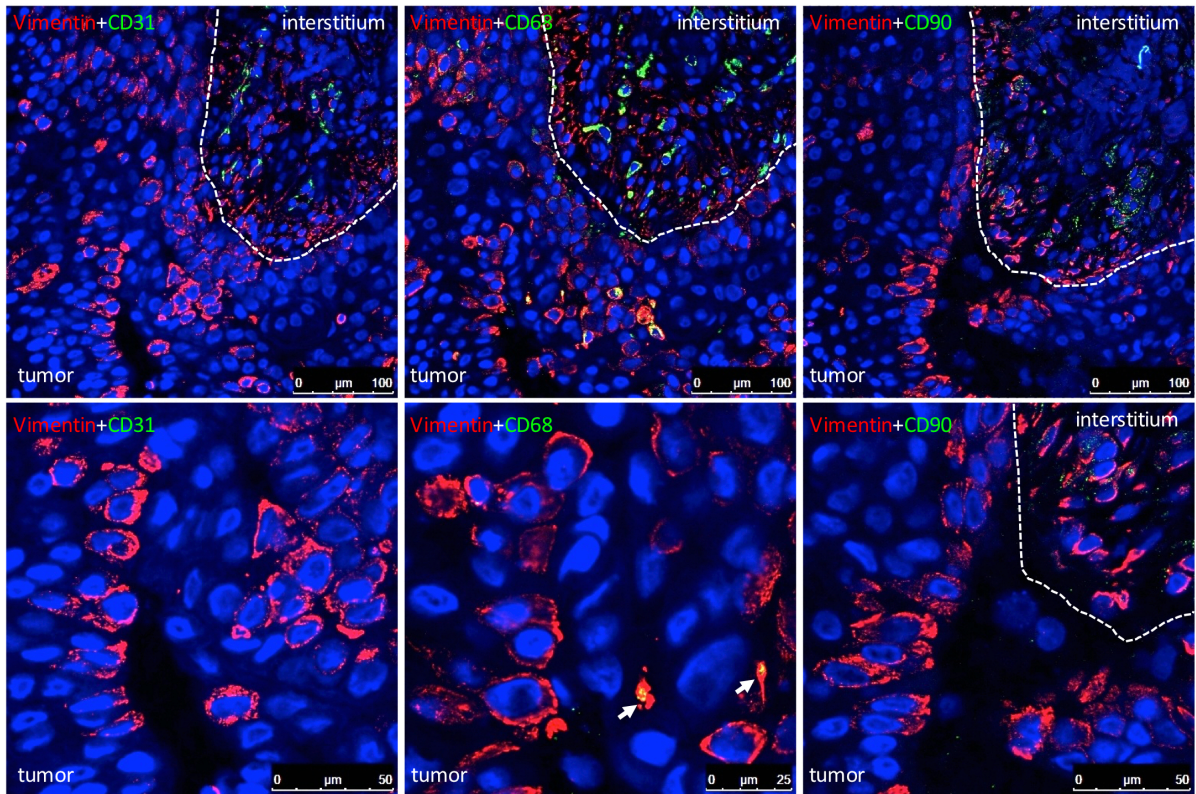


High Expression of EpCAM and Sox2 is a Positive Prognosticator of Clinical Outcome for Head and Neck Carcinoma

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Supplementary Figure 1 - Detection of CD31, CD68 and CD90 in HNSCC.

CD31 (endothelial cells, monocytes, neutrophils), CD68 (monocytes, macrophages) and CD90 (fibroblasts, stem cells, thymocytes) expression was analyzed in simultaneous immunofluorescence staining with vimentin one HNSCC specimen. All markers were depicted as red staining except for vimentin (green). Nuclear DNA is stained in blue with DAPI. The margin between tumor and interstitium are marked as dotted lines. Vimentin⁺/CD68⁺ cells are marked with white arrows. Lower panels show higher magnification of selected areas.

Supplementary Table 1: IHC scores of EpEX, Sox2, and vimentin expression in HNSCC primary tumors of the LMU cohort (n=94). Scores have been evaluated by 3 (EpEX and Sox2) and 2 (vimentin) experimenters and are shown as single and mean values. Data on gender, age, smoking behavior, p16 expression as a surrogate for HPV status, HNSCC tumor localization as well as T and N status for the study participants of the LMU cohort are listed beneath.

Patient	EpEx IHC score 1	EpEx % x int.	EpEx IHC score 2	EpEx % x int.	EpEX IHC score 3	EpEx % x int.	Mean EpEx IHC score
1	300	100*3	270	90*3 10*0	300	100*3	290.0
2	130	20*3 20*2 30*1 30*0	240	70*3 10*2 10*1 10*0	150	30*3 20*2 20*1 30*0	173.3
3	0	100*0	0	100*0	0	100*0	0.0
4	180	10*3 70*2 10*1 10*0	190	10*3 80*2 10*0	120	40*2 40*1 20*0	163.3
5	280	90*3 10*1	280	80*3 20*2	250	50*3 50*2	270.0
6	290	90*3 10*2	150	50*2 50*1	300	100*3	246.7
7	280	90*3 5*2 5*0	300	100*3	300	100*3	293.3
8	280	80*3 20*2	250	70*3 20*2 10*0	280	80*3 20*2	270.0
9	170	20*3 30*2 50*1			230	50*3 30*2 20*1	200.0
10	110	30*3 10*2 60*0	140	40*3 10*2 50*0	150	40*3 10*2 10*1 40*0	133.3
11	180	20*3 40*2 40*1			180	20*3 50*2 20*1 10*0	180.0
12	190	20*3 60*2 10*1 10*0	110	40*2 30*1 30*0	220	50*3 20*2 30*1	173.3
13	290	90*3 10*2			270	70*3 30*2	280.0
14	230	60*3 10*2 30*1	240	80*3 20*0	240	80*3 20*0	236.7
15	230	50*3 30*2 20*1			210	50*3 20*2 20*1 10*0	220.0
16	170	30*3 20*2 40*1 10*0			230	50*3 30*2 20*1	200.0
17	240	60*3 20*2 20*1	220	70*3 10*1 20*0	250	80*3 10*1 10*0	236.7
18	160	20*3 50*2 30*0	170	70*2 30*1	115	10*3 30*2 25*1 35*0	148.3
19	270	80*3 10*2 10*1	280	80*3 20*2	280	90*3 10*1	276.7
20	180	30*3 30*2 30*1 10*0			210	30*3 50*2 20*1	195.0
21	230	70*3 20*1 10*0	280	80*3 20*2	220	60*3 20*2 20*0	243.3
22	160	20*3 30*2 40*1 10*0			210	50*3 20*2 20*1 10*0	185.0
23	150	20*3 30*2 30*1 20*0	230	30*3 70*2	250	50*3 50*2	210.0
24	150	50*3 50*0			170	40*3 20*2 10*1 30*0	160.0
25	260	70*3 20*2 10*1			290	90*3 10*2	275.0
26	190	40*3 30*2 10*1 10*0	260	80*3 20*1	280	80*3 20*2	243.3
27	230	70*3 20*1 10*0	200	100*2	250	50*3 50*2	226.7

28	280	90*3 10*1	300	100*3	300	100*3	293.3
29	260	70*3 20*2 10*1	290	90*3 10*2	300	100*3	283.3
30	110	20*2 70*1 10*0	100	100*1	130	40*2 50*1 10*0	113.3
31	140	30*3 20*2 10*1 60*0	180	40*3 30*2 30*0	190	50*3 20*2 30*0	170.0
32	280	80*3 20*2			230	60*3 15*2* 20*1 5*0	255.0
33	15	5*3 95*0	70	30*2 10*1 60*0	80	30*2 20*1 50*0	55.0
34	220	60*3 10*2 20*1 10*0	230	60*3 20*2 10*1 10*0	250	60*3 30*2 10*0	233.3
35	70	20*3 10*1 70*0			280	80*3 20*2	175.0
36	290	90*3 10*2	280	80*3 20*2	300	100*3	290.0
37	6	2*3 98*0			0	100*0	3.0
38	265	80*3 10*2 5*1 5*0	280	80*3 20*2	290	90*3 10*2	278.3
39	15	5*3 95*0			35	5*3 10*2 85*0	25.0
40	270	70*3 30*2			200	30*3 40*2 30*1	235.0
41	230	70*3 20*1 10*0	250	80*3 10*1 10*0	220	60*3 10*2 20*1 10*0	233.3
42	0	100*0			5	5*1 95*0	2.5
43	170	20*3 50*2 10*1 20*0	255	70*3 20*2 5*1 5*0	230	60*3 20*2 10*1 10*0	218.3
44	40	5*3 25*1 70*0	20	20*1 80*0	70	5*3 20*2 15*1 60*0	43.3
45	260	70*3 20*2 10*1			290	90*3 10*2	275.0
46	110	30*3 10*2 60*0	150	30*3 30*2 40*0	140	40*3 20*1 40*0	133.3
47	130	40*3 10*1 50*0			220	70*3 10*1 20*0	175.0
48	170	30*3 30*2 20*1 20*0	240	70*3 10*2 10*1 10*0	260	60*3 40*2	223.3
49	70	10*3 10*2 20*1 60*0	140	30*3 20*2 10*1 40*0	120	50*2 20*1 30*0	110.0
50	300	100*3	300	100*3	300	100*3	300.0
51							
52	80	10*2 60*1 30*0	40	20*2 80*0	80	10*2 60*1 30*0	66.7
53	280	90*3 10*1	300	100*3	300	100*3	293.3
54	300	100*3	210	10*3 90*2	300	100*3	270.0
55	240	70*3 10*2 10*1 10*0			260	80*3 20*1	250.0
56	210	50*3 30*2 20*0	290	90*3 10*2	270	70*3 30*2	256.7
57	180	30*3 30*2 30*1 10*0			210	30*3 50*2 20*1	195.0
58	160	30*3 20*2 30*1 20*0	250	70*3 20*2 10*0	180	40*3 20*2 20*1 20*0	196.7
59	200	30*3 40*2 30*1	190	10*3 80*2 10*0	260	70*3 20*2 10*1	216.7
60	60	10*3 30*1	30	5*2 20*1	80	30*2 20*1	56.7

		60*0		75*0		50*0	
61	185	20*3 50*2 25*1 5*0	170	10*3 70*2 20*0	250	60*3 30*2 10*1	201.7
62	300	100*3	270	90*3 10*0	280	80*3 20*2	283.3
63	190	40*3 30*2 10*1 20*0	150	50*3 50*0	250	80*3 10*1 10*0	196.7
64	170	30*3 20*2 40*1 10*0	110	30*3 10*2 60*0	160	40*3 20*2 40*0	146.7
65	260	60*3 40*2			220	30*3 65*2 5*0	240.0
66	200	30*3 40*2 30*1	250	50*3 50*2	200	30*3 40*2 30*1	216.7
67	300	100*3	300	100*3	300	100*3	300.0
68	300	100*3	300	100*3	300	100*3	300.0
69	5	5*1 95*0	30	30*1 70*0	30	10*2 10*1 80*0	21.7
70	5	5*1 95*0	0	100*0	0	100*0	1.7
71	260	70*3 20*2 10*1	280	80*3 20*2	280	80*3 20*2	273.3
72	150	10*3 40*2 40*1 10*0			160	10*3 60*2 10*1 10*0	155.0
73	275	90*3 5*1 5*0	270	80*3 10*2 10*1	280	90*3 10*1	275.0
74	0	100*0	15	5*3 95*0	20	20*1 80*0	11.7
75	290	90*3 10*2			290	90*3 10*2	290.0
76	250	80*3 10*1 10*0			240	70*3 10*2 10*1 10*0	245.0
77	260	80*3 20*1	270	80*3 10*2 10*1	300	100*3	276.7
78	270	70*3 30*2	250	50*3 50*2	270	70*3 30*2	263.3
79	35	5*3 10*2 85*0	55	10*3 10*2 5*1 75*0	100	10*3 30*2 10*1 50*0	63.3
80	200	40*3 30*2 20*1 10*0	210	40*3 40*2 10*1 10*0	200	40*3 30*2 20*1 10*0	203.3
81	220	60*3 10*2 20*1 20*0	250	50*3 50*2	280	80*3 20*2	250.0
82	160	10*3 40*2 50*1			180	30*3 40*2 10*1 20*0	170.0
83	80	10*3 25*2 65*0			175	30*3 30*2 25*1 15*0	127.5
84	270	70*3 30*2			250	60*3 30*2 10*1	260.0
85	285	90*3 5*2 5*1	285	95*3 5*0	300	100*3	290.0
86	280	90*3 10*1	280	80*3 20*2	300	100*3	286.7
87	235	60*3 20*2 15*1 5*0	120	60*2 40*0	245	70*3 10*2 15*1 5*0	200.0
88	200	50*3 20*2 10*1 20*0	280	80*3 20*2	210	50*3 20*2 20*1 10*0	230.0
89	100	10*3 10*2 50*1 30*0	50	50*1 50*0	90	10*3 20*2 20*1 50*0	80.0
90	170	40*3 10*2 30*1 20*0	290	90*3 10*2	230	50*3 30*2 20*1	230.0
91	150	20*3 30*2 30*1 20*0			190	20*3 50*2 30*1	170.0
92	85	5*3 5*2 60*1 30*0	90	10*3 60*1 30*0	160	20*3 40*2 20*1 20*0	111.7

93	270	70*3 30*2	270	70*3 30*2	280	80*3 20*2	273.3
94	290	90*3 10*2	300	100*3	300	100*3	296.7

Patient	Sox2 IHC score 1	Sox2 % x int.	Sox2 IHC score 2	Sox2 % x int.	Sox2 IHC score 3	Sox2 % x int.	Mean Sox2 IHC score
1	0	100*0	0	100*0	0	100*0	0.0
2	120	20*3 20*2 20*1 40*0	240	70*3 10*2 10*1 10*0	140	30*3 20*2 10*1 40*0	166.7
3	0	100*0	10	10*1 90*0	90	40*2 10*1 50*0	33.3
4	0	100*0	0	100*0	0	100*0	0.0
5	30	30*1 70*0	5	5*1 95*0	20	20*1 80*0	18.3
6	240	80*3 20*0	150	50*2 50*1	70	10*3 20*2 70*0	153.3
7	185	10*3 70*2 15*1 5*0	100	20*3 20*2 60*0	170	40*3 20*2 10*1 30*0	151.7
8	10	10*1 90*0	10	10*1 90*0	30	10*2 10*1 80*0	16.7
9	0	100*0			0	100*0	0.0
10	170	30*3 40*2 30*0	140	40*3 10*2 50*0	210	60*3 10*2 10*1 20*0	173.3
11	10	10*1 90*0			10	10*1 90*0	10.0
12	40	10*2 20*1 70*0	90	30*2 30*1 40*0	10	10*1 90*0	46.7
13	220	50*3 30*2 10*1 10*0			220	70*3 10*1 20*0	220.0
14	200	30*3 40*2 30*1	180	20*3 60*2 20*0	120	50*2 20*1 30*0	166.7
15	90	20*3 10*2 10*1 60*0			150	40*3 10*2 10*1 40*0	120.0
16	140	30*3 20*2 10*1 40*0			100	20*3 20*2 60*0	120.0
17	190	30*3 40*2 20*1 10*0	120	30*3 30*1 40*0	200	50*3 20*2 10*1 20*0	170.0
18	60	30*2 70*0	55	5*3 40*1 55*0	120	20*3 20*2 20*1 40*0	78.3
19	230	60*3 20*2 10*1 10*0	270	70*3 30*2	280	90*3 10*1	260.0
20	130	10*3 30*2 40*1 20*0			170	40*3 20*2 10*1 30*0	150.0
21	240	70*3 10*2 10*1 10*0	280	80*3 20*2	200	60*3 10*2 30*0	240.0
22	70	10*3 10*2 20*1 60*0			130	10*3 40*2 20*1 30*0	100.0
23	0	100*0	0	100*0	5	5*1 95*0	1.7
24	230	70*3 10*2 20*0			220	60*3 20*2 20*0	225.0
25	240	60*3 20*2 20*1			255	70*3 20*2 5*1 5*0	247.5
26	230	50*3 30*2 20*1	160	80*2 20*0	180	40*3 20*2 20*1 20*0	190.0
27	0	100*0	100	100*1	0	100*0	33.3
28	120	40*2 40*1 20*0	100	40*2 20*1 40*0	190	50*3 20*2 30*0	136.7

29	35	5*3 20*1 75*0	60	20*3 80*0	50	10*3 10*2 80*0	48.3
30	80	80*1 20*0	40	40*1 60*0	10	10*1 90*0	43.3
31	170	30*3 30*2 20*1 20*0	180	40*3 30*2 30*0	200	60*3 10*2 30*0	183.3
32	240	60*3 20*2 20*1			220	60*3 10*2 20*1 10*0	230.0
33	0	100*0	30	30*1 70*0	0	100*0	10.0
34	30	30*1 70*0	40	20*2 80*0	50	10*3 10*2 80*0	40.0
35	120	20*3 20*2 20*1 40*0			140	60*2 20*1 20*0	130.0
36	290	90*3 10*2	280	80*3 20*2	230	60*3 20*2 10*1 10*0	266.7
37	0	100*0			0	100*0	0.0
38	255	70*3 20*2 5*1 5*0	270	70*3 30*2	270	80*3 10*2 10*1	265.0
39	90	10*3 20*2 20*1 50*0			40	40*1 60*0	65.0
40	0	100*0			0	100*0	0.0
41	190	30*3 50*2 20*0	230	70*3 10*2 20*0	200	50*3 20*2 10*1 20*0	206.7
42	0	100*0			0	100*0	0.0
43	190	50*3 20*2 30*0	210	40*3 40*2 10*1 10*0	240	70*3 10*2 10*1 10*0	213.3
44	0	100*0	5	5*1 95*0	0	100*0	1.7
45	160	40*3 10*2 20*1 30*0			230	60*3 20*2 10*1 10*0	195.0
46	140	30*3 20*2 10*1 40*0	210	70*3 30*0	170	50*3 20*1 30*0	173.3
47	140	30*3 20*2 10*1 40*0			200	50*3 20*2 10*1 20*0	170.0
48	110	10*3 20*2 40*1 30*0	70	10*2 50*1 40*0	120	20*3 20*2 20*1 20*0	100.0
49	205	30*3 50*2 15*1 5*0	280	80*3 20*2	230	40*3 50*2 10*1	238.3
50	280	80*3 20*2	300	100*3	260	70*3 20*2 10*1	280.0
51	190	40*3 30*2 10*2 20*0					190.0
52	30	30*1 70*0	0	100*0	0	100*0	10.0
53	260	80*3 20*1	300	100*3	210	50*3 20*2 20*1 10*0	256.7
54	0	100*0	0	100*0	10	10*1 90*0	3.3
55	30	30*1 70*0			5	5*1 95*0	17.5
56	220	50*3 20*2 30*1	290	90*3 10*2	260	70*3 20*2 10*1	256.7
57	160	30*3 20*2 30*1 20*0			240	60*3 30*2 10*0	200.0
58	140	30*3 10*2 30*1 30*0	160	70*2 20*1 10*0	170	40*3 20*2 10*1 30*0	156.7
59	230	60*3 10*2 30*1	250	80*3 10*1 10*0	250	70*3 15*2 10*1 5*0	243.3
60	20	20*1 80*0	0	100*0	10	10*1 90*0	10.0
61	190	30*3 40*2 20*1 10*0	130	10*3 50*2 40*0	160	30*3 20*2 30*1 20*0	160.0
62	275	90*3 5*1 5*0	250	80*3 10*1	200	30*3 40*2	241.7

				10*0		30*1	
63	140	15*3 30*2 35*1 20*0	140	40*3 10*2 50*0	170	50*3 20*1 30*0	150.0
64	100	10*3 20*2 30*1 40*0	90	30*3 70*0	70	10*3 20*2 70*0	86.7
65	230	50*3 30*2 20*1			235	60*3 20*2 15*1 5*0	232.5
66	210	40*3 30*2 30*1	250	50*3 50*2	230	50*3 30*2 20*1	230.0
67	30	30*1 70*0	0	100*0	0	100*0	10.0
68	0	100*0	0	100*0	0	100*0	0.0
69	30	30*1 70*0	0	100*0	20	20*1 80*0	16.7
70	0	100*0			0	100*0	0.0
71	260	70*3 20*2 10*1	280	80*3 20*2	280	80*3 20*2	273.3
72	250	70*3 20*2 10*0			250	80*3 10*1 10*0	250.0
73	275	90*3 5*1 5*0	260	70*3 20*2 10*1	300	100*3	278.3
74	0	100*0	0	100*0	5	5*1 95*0	1.7
75	170	20*3 40*2 30*1 10*0			200	60*3 20*1 20*0	185.0
76	180	40*3 20*2 20*1 20*0			220	70*3 10*1 20*0	200.0
77	140	30*3 50*1 20*0	120	30*3 30*1 40*0	80	30*2 20*1 50*0	113.3
78	250	60*3 30*2 10*1	270	70*3 30*2	140	60*2 20*1 20*0	220.0
79	100	20*3 10*2 20*1 50*0	110	30*3 10*2 60*0	170	40*3 20*2 10*1 30*0	126.7
80	230	40*3 50*2 10*1	220	40*3 40*2 20*1	230	50*3 30*2 20*1	226.7
81	130	20*3 20*2 30*1 20*0	170	30*3 30*2 20*1 20*0	200	40*3 30*2 20*1 10*0	166.7
82	170	30*3 20*2 40*1 10*0			140	60*2 20*1 20*0	155.0
83	33	1*3 15*2 84*0			50	10*3 10*2 70*0	41.5
84	45	10*2 25*1 65*0			30	10*2 10*1 80*0	37.5
85	190	40*3 30*2 10*1 20*0	250	70*3 20*2 10*0	280	80*3 20*2	240.0
86	170	40*3 50*1 10*0	130	30*3 20*2 50*0	130	30*3 20*2 50*0	143.3
87	40	5*2 30*1 65*0	10	5*2 95*0	30	10*2 10*1 80*0	26.7
88	220	60*3 20*2 20*0	280	80*3 20*2	210	60*3 10*2 10*1 20*0	236.7
89	60	5*3 10*2 25*1 60*0	45	15*2 15*1 70*0	90	10*3 20*2 20*1 50*0	65.0
90	160	40*3 10*2 20*1 30*0	210	70*3 30*0	200	50*3 20*2 10*1 20*0	190.0
91	40	10*2 20*1 70*0			30	10*2 10*1 80*0	35.0
92	80	5*2 70*1 25*0	80	10*3 50*1 40*0	180	40*3 20*2 20*1 20*0	113.3
93	150	10*3 50*2	90	10*2 70*1	30	30*1 70*0	90.0

		20*1 20*0		20*0			
94	270	80*3 10*2 10*1	290	90*3 10*2	300	100*3	286.7

Patient	Vimentin IHC score 1	Vimentin % x int.	Vimentin IHC score 2	Vimentin % x int.	Mean vimentin IHC score
1	0	100*0	0	100*0	0
2	0	100*0	0	100x*0	0
3	0	100*0	90	30*3 70*0	45
4	0	100*0	20	20*1 80*0	10
5	280	80*3 20*2	300	100*3	290
6	0	100*0	100	50*2 50*0	50
7	0	100*0	0	100*0	0
8	60	60*1 40*0	60	30*2 70*0	60
9	100	100*1	260	80*3 20*1	180
10	20	10*2 90*0	0	100*0	10
11			250	50*3 50*2	125
12	0	100*0	0	100*0	0
13	75	25*3 75*0	0	100*0	37.5
14	90	10*3 10*2 40*1 40*0	20	20*1 80*0	55
15	0	100*0	0	100*0	0
16	0	100*0	0	100*0	0
17	0	100*0	0	100*0	0
18	0	100*0	0	100*0	0
19	35	5*3 20*1 75*0	0	100*0	17.5
20	0	100*0	10	10*2 90*0	5
21	0	100*0	0	100*0	0
22	20	10*2 90*0	30	30*1 70*0	25
23	160	70*2 20*1 10*0	60	60*1 40*0	110
24	0	100*0	0	100*0	0
25	0	100*0	0	100*0	0
26	0	100*0	0	100*0	0
27	90	90*1 10*0	100	100*1	95
28	30	10*3 90*0	0	100*0	15
29	170	80*2 10*1 10*0	90	90*1 10*0	130
30	0	100*0	0	100*0	0
31	30	10*3 90*0	20	20*1 80*0	25
32	30	10*3 90*0	0	100*0	15
33	190	90*2 10*1	300	100*3	245
34	110	30*3 20*1 50*0	120	40*3 60*0	115
35	200	40*3 30*2 20*1 10*0	200	100*2	200
36	100	30*2 40*1 20*0	200	100*2	150
37	200	100*2	200	100*2	200
38	0	100*0	0	100*0	0
39			0	100*0	0
40	0	100*0	40	20*2 80*0	20
41	0	100*0	0	100*0	0
42	0	100*0	0	100*0	0
43	30	10*2 10*1 80*0	120	60*2 40*0	75
44	60	60*1 40*0	190	90*2 10*1	125

45	0	100*0	0	100*0	0
46	20	10*2 90*0	20	20*2 80*0	20
47	0	100*0	0	100*0	0
48	0	100*0	0	100*0	0
49	20	5*2 10*1 85*0	0	100*0	10
50	0	100*0	0	100*0	0
51					140
52	200	100*2	300	100*3	250
53	200	100*2	200	100*2	200
54			0	100*0	0
55	0	100*0	20	20*1 80*0	10
56	15	5*3 95*0	0	100*0	7.5
57	15	15*1 85*0	90	90*1 100*0	52.5
58	0	100*0	0	100*0	0
59	85	5*3 30*2 10*1 65*0	90	30*3 70*0	87.5
60	30	10*2 10*1 80*0	80	40*2 60*0	55
61			0	100*0	0
62	20	5*3 5*1 90*0	20	10*2 90*0	20
63	0	100*0	0	100*0	0
64	0	100*0	0	100*0	0
65	30	10*3 90*0	0	100*0	15
66	10	10*1 90*0	0	100*0	5
67	240	40*3 60*2	120	60*2 40*0	180
68	0	100*0	0	100*0	0
69	10	10*1 90*0	20	20*1 80*0	15
70			0	100*0	0
71			0	100*0	0
72	0	100*0	0	100*0	0
73	0	100*0	0	100*0	0
74	0	100*0	0	100*0	0
75	90	30*3 70*0	120	40*3 60*0	105
76	30	10*3 90*0	90	30*3 70*0	60
77	190	90*2 10*1	300	100*3	245
78	50	50*1 50*0	80	80*1 20*0	65
79	0	100*0	40	20*2 80*0	20
80	0	100*0	0	100*0	0
81	0	100*0	0	100*0	0
82	0	100*0	0	100*0	0
83	0	100*0	0	100*0	0
84	30	10*3 90*0	90	30*3 70*0	60
85	0	100*0	0	100*0	0
86	15	5*3 95*0	40	20*2 80*0	27.5
87	30	10*3 90*0	100	100*1	65
88	15	5*3 95*0	0	100*0	7.5
89	0	100*0	0	100*0	0
90	30	10*3 90*0	45	15*3 85*0	37.5
91	160	20*3 50*2 30*0	270	90*3 10*0	215
92	0	100*0	0	100*0	0
93	15	5*3 95*0	0	100*0	7.5
94	80	10*3 50*1 40*0	20	20*1 80*0	50

Patient	Gender	Age	Age groups	Smoking status	p16	Localisation
1	male	58	50-69	current	negative	Oropharynx
2	male	63	50-69	current	negative	Oral cavity
3	female	65	50-69	former	negative	Oral cavity
4	male	49	<50	current	n.p.	Oral cavity
5	male	68	50-69	n.p.	n.p.	Oropharynx
6	male	63	50-69	current	n.p.	Oral cavity
7	female	44	<50	current	n.p.	Hypopharynx & Larynx
8	male	71	>69	current	n.p.	Hypopharynx & Larynx
9	male	63	50-69	former	negative	Oropharynx
10	male	51	50-69	current	negative	Oral cavity
11	female	70	>69	current	negative	Oropharynx
12	male	46	<50	current	negative	Oropharynx
13	male	67	50-69	never	positive	Oropharynx
14	male	72	>69	former	positive	Oropharynx
15	female	50	50-69	current	negative	Oral cavity
16	male	55	50-69	current	negative	Oropharynx
17	male	77	>69	n.p.	negative	Hypopharynx & Larynx
18	female	45	<50	current	negative	Oropharynx
19	male	68	50-69	former	positive	Oropharynx
20	male	58	50-69	former	negative	Oropharynx
21	male	66	50-69	current	negative	Oropharynx
22	male	58	50-69	former	positive	Oropharynx
23	female	47	<50	current	positive	Oropharynx
24	female	60	50-69	current	negative	Oral cavity
25	male	54	50-69	current	negative	Hypopharynx & Larynx
26	female	68	50-69	current	negative	Oropharynx
27	male	43	<50	current	n.p.	Oral cavity
28	female	46	<50	current	positive	Oropharynx
29	female	68	50-69	n.p.	n.p.	Hypopharynx & Larynx
30	male	42	<50	n.p.	n.p.	Oropharynx
31	female	77	>69	current	negative	Oral cavity
32	male	78	>69	never	positive	Oropharynx
33	male	49	<50	current	negative	Oral cavity
34	male	61	50-69	former	negative	Oral cavity
35	male	61	50-69	current	negative	Oral cavity
36	male	66	50-69	former	negative	Oropharynx
37	male	70	>69	current	negative	Oropharynx
38	male	74	>69	never	positive	Oropharynx
39	male	55	50-69	former	positive	Oropharynx
40	male	64	50-69	n.p.	n.p.	Hypopharynx & Larynx
41	male	56	50-69	current	negative	Oral cavity
42	male	52	50-69	former	negative	Oropharynx
43	female	54	50-69	former	negative	Oral cavity
44	female	78	>69	never	negative	Oral cavity
45	male	92	>69	former	positive	Oropharynx
46	male	70	>69	current	negative	Oral cavity
47	male	61	50-69	current	negative	Oropharynx
48	male	69	50-69	current	negative	Oropharynx
49	female	63	50-69	never	positive	Oropharynx
50	male	67	50-69	n.p.	negative	Hypopharynx & Larynx
51	male	71	>69	current	negative	Oropharynx
52	male	63	50-69	current	negative	Oral cavity
53	male	54	50-69	never	positive	Oropharynx

54	male	49	<50	never	positive	Oropharynx
55	male	50	50-69	n.p.	negative	Hypopharynx & Larynx
56	male	49	<50	former	positive	Oropharynx
57	male	78	>69	never	positive	Oropharynx
58	male	75	>69	never	positive	Oropharynx
59	male	77	>69	n.p.	n.p.	Oropharynx
60	male	62	50-69	current	negative	Oral cavity
61	male	50	50-69	n.p.	n.p.	Oropharynx
62	male	50	50-69	n.p.	n.p.	Oral cavity
63	male	51	50-69	former	n.p.	Hypopharynx & Larynx
64	male	79	>69	current	negative	Oral cavity
65	male	69	50-69	never	positive	Oropharynx
66	male	62	50-69	Never	positive	Oropharynx
67	male	54	50-69	current	negative	Oropharynx
68	male	65	50-69	Never	positive	Oropharynx
69	male	65	50-69	former	negative	Oropharynx
70	male	56	50-69	former	positive	Oropharynx
71	female	55	50-69	current	positive	Oropharynx
72	female	64	50-69	current	negative	Hypopharynx & Larynx
73	male	57	50-69	current	n.p.	Hypopharynx & Larynx
74	male	62	50-69	former	negative	Hypopharynx & Larynx
75	female	61	50-69	current	negative	Oropharynx
76	male	68	50-69	former	negative	Hypopharynx & Larynx
77	male	75	>69	former	n.p.	Hypopharynx & Larynx
78	male	68	50-69	Never	positive	Oropharynx
79	male	63	50-69	n.p.	n.p.	Oral cavity
80	male	62	50-69	current	negative	Oropharynx
81	male	44	<50	former	positive	Oropharynx
82	male	74	>69	current	negative	Hypopharynx & Larynx
83	female	71	>69	Never	negative	Oral cavity
84	female	52	50-69	current	negative	Oropharynx
85	male	48	<50	former	positive	Oropharynx
86	male	49	<50	current	negative	Oral cavity
87	female	49	<50	current	negative	Oropharynx
88	male	57	50-69	former	positive	Oropharynx
89	male	64	50-69	former	n.p.	Oral cavity
90	male	53	50-69	current	negative	Oropharynx
91	male	61	50-69	former	positive	Oral cavity
92	male	68	50-69	current	positive	Oropharynx
93	male	61	50-69	current	positive	Oropharynx
94	male	55	50-69	current	positive	Oropharynx

Patient	T Stage	N Stage
1	pT3	cN0
2	pT2	cN0
3	pT2	cN0
4	pT3	pN0
5	n.p.	n.p.
6	n.p.	cN0
7	pT3	pN1
8	pT3	cN0
9	pT3	cN0
10	pT2	pN2a
11	pT1	pN0
12	pT2	pN0
13	pT2	pN2c
14	pT2	pN1
15	pT3	pN2c
16	pT2	pN2c
17	pT1	cN0
18	pT3	pN2b
19	pT3	pN1
20	pT4a	pN3
21	pT2	pN0
22	pT3	pN3
23	pT3	pN1
24	pT1	pN0
25	pT4a	pN2b
26	pT3	pN0
27	pT1	pN0
28	pT2	pN2b
29	pT1	pN0
30	pT2	pN2b
31	pT2	pN0
32	pT3	pN2b
33	pT3	pN1
34	pT2	pN2b
35	pT3	pN2c
36	pT3	pN2b
37	pT2	pN2b
38	pT3	pN1
39	pT2	pN0
40	pT2	pN0
41	pT1	pN0
42	pT3	pN2c
43	pT3	pN1
44	pT2	pN0
45	pT3	pN1
46	pT2	pN1
47	pT3	pN0
48	pT3	pN2b
49	pT2	pN1
50	pT4b	pN1
51	pT3	pN2b
52	pT2	pN2c
53	pT2	pN2c
54	pT3	pN0
55	pT4a	pN2c

56	pT2	pN2a
57	pT3	pN2b
58	pT2	pN2c
59	pT2	pN2b
60	pT2	pN0
61	pT1	pN2b
62	pT2	pN2b
63	pT3	pN2a
64	pT2	pN0
65	pT2	pN2b
66	pT2	pN2b
67	pT3	pN2b
68	pT2	pN2a
69	pT1	pN2b
70	pT3	pN2b
71	pT1	pN2b
72	pT4a	pN2c
73	pT3	cN0
74	pT1	cN0
75	pT2	pN0
76	pT4a	pN1
77	pT2	pN1
78	pT1	pN1
79	pT1	pN0
80	pT4a	pN1
81	pT2	pN2b
82	pT3	pN0
83	pT3	pN0
84	pT3	cN0
85	pT2	pN2b
86	pT2	pN0
87	pT3	pN2b
88	pT2	pN0
89	pT2	pN0
90	pT3	pN3
91	pT1	pN1
92	pT2	pN1
93	pT3	pN2b
94	pT2	pN2c

Supplementary Table 2: IHC scores of EpEx, Sox2, and vimentin expression in HNSCC primary tumors of the Göttingen cohort (n=94). Scores have been evaluated by two experimenters and are shown separately as well as mean IHC scores. Data on gender, age, smoking behavior, p16 expression as a surrogate for HPV status, HNSCC tumor localization as well as TN status and whether chemotherapy was administered together with primary radiation are listed beneath.

Patient	EpEx IHC score 1	EpEx % x int.	EpEx IHC score 2	EpEx % x int.	Mean EpEx IHC score
1	0	100*0	0	100*0	0
2	0	100*0	0	100*0	0
3	0	100*0	0	100*0	0
4	0	100*0			0
5	240	80*3 20*0	240	80*3 20*0	240
6	30	10*3 90*0	60	20*3 80*0	45
7	150	50*3 50*0	150	50*3 50*0	150
8	150	50*3 50*0	150	50*3 50*0	150
9	200	100*2			200
10	150	50*3 50*0	150	50*3 50*0	150
11	300	100*3			300
12	150	50*3 50*0	150	50*3 50*0	150
13	150	50*3 50*0			150
14	0	100*0			0
15	60	20*3 80*0			60
16	240	80*3 20*0			240
17	0	100*0			0
18	5	95*0			5
19	200	100*2	160	80*2 20*0	180
20	300	100*3	300	100*3	300
21	0	100*0			0
22	80	40*2 60*0	40	20*2 80*0	60
23	60	30*2 70*0	40	20*2 80*0	50
24	300	100*3	300	100*3	300
25	0	100*0	0	100*0	0
26	150	50*3 50*0	150	50*3 50*0	150
27	120	40*3 60*0	0	100*0	60
28	120	60*2 40*0	120	60*2 40*0	120
29	0	100*0	0	100*0	0
30	30	10*3 90*0	120	40*3 60*0	75
31	90	30*3 70*0	90	30*3 70*0	90
32	120	40*3 60*0	120	40*3 60*0	120
33	160	80*2 20*0	160	80*2 20*0	160
34	0	100*0	0	100*0	0
35	300	100*3	300	100*3	300
36	0	100*0	0	100*0	0
37	15	5*3 95*0	15	5*3 95*0	15
38	30	10*3 90*0	30	10*3 90*0	30
39	0	100*0			0
40					
41	90	30*3 70*0	90	30*3 70*0	90
42	90	30*3 70*0			90
43	90	30*3 70*0	90	30*3 70*0	90
44	0	100*0	0	100*0	0
45	0	100*0	0	100*0	0
46	0	100*0	0	100*0	0
47					
48	300	100*3			300
49	0	100*0			0

50	0	100*0	0	100*0	0
51	0	100*0			0
52	300	100*3	300	100*3	600
53	0	100*0	0	100*0	0
54	300	100*3	300	100*3	300
55	0	100*0	0	100*0	0
56	0	100*0	60	20*3 80*0	60
57	30	10*3 90*0			30
58					
59	240	80*3 20*0	270	90*3 10*0	255
60	0	100*0			0
61					
62	60	20*3 80*0	60	20*3 80*0	60
63	0	100*0	0	100*0	0
64	150	50*3 50*0			150
65	0	100*0	0	100*0	0
66					
67					
68					
69	0	100*0			0
70	300	100*3	300	100*3	300
71	0	100*0	0	100*0	0
72	60	20*3 80*0	30	10*3 90*0	45
73	180	60*3 40*0	180	60*3 40*0	180
74	0	100*0	0	100*0	0
75	180	60*3 40*0	180	60*3 40*0	180
76	0	100*0	0	100*0	0
77	240	80*3 20*0	240	80*3 20*0	240
78	0	100*0	0	100*0	0
79	0	100*0	0	100*0	0
80	15	5*3 95*0			15
81	0	100*0	0	100*0	0
82	15	5*3 95*0			15
83	90	30*3 70*0	90	30*3 70*0	90
84	0	100*0	0	100*0	0
85	0	100*0			0
86	300	100*3	300	100*3	300
87	300	100*3	300	100*3	300
88	90	30*3 70*0	90	30*3 70*0	90
89	300	100*3	300	100*3	300
90	0	100*0	0	100*0	0
91	0	100*0	0	100*0	0
92	0	100*0	0	100*0	0
93	0	100*0	0	100*0	0
94	0	100*0	0	100*0	0

Patient	Sox2 IHC score 1	Sox2 % x int.	Sox2 IHC score 2	Sox2 % x int.	Mean Sox2 IHC score
1	0	100*0	0	100*0	0
2	0	100*0	50	50*1 50*0	25
3	100	50*2 50*0	100	50*2 50*0	100
4	0	100*0	300	100*3	150
5			300	100*3	300

6			10	10*1 90*0	10
7	200	100*2	300	100*3	250
8	0		0		0
9	100	50*2 50*0	100	50*2 50*0	100
10	300	100*3	300	100*3	300
11			300	100*3	300
12	250	50*3 50*2	0	100*0	125
13	130	20*3 30*2 10*1 40*0			130
14	10	10*1 90*0	30	10*2 10*1 80*0	20
15	300	100*3			300
16	40	10*2 20*1 70*0	0		20
17	0	100*0			0
18	0		0		0
19	160	80*2 20*0	140	70*2 30*0	150
20	300	100*3	300	100*3	300
21					
22	170	30*3 40*2 30*0	200	100*2	185
23	250	50*3 50*2	250	50*3 50*2	250
24			40	20*2 80*0	40
25	300	100*3	300	100*3	300
26	200	100*2	200	100*2	200
27	0	100*0	0	100*0	0
28	20	20*1 80*0	20	20*1 80*0	20
29	300	100*3			300
30	160	80*2 20*0	40	20*2 80*0	100
31	0	100*0	0	100*0	0
32	200	100*2	200	100*2	200
33	300	100*3	300	100*3	300
34	0	100*0	0	100*0	0
35	300	100*3	300	100*3	300
36	40	20*2 80*0	100	50*2 50*0	70
37	80	40*2 60*0	80	40*2 60*0	80
38	300	100*3	150	50*2 50*1	225
39	120	60*2 40*0	0		60
40	210	70*3 30*0	110	30*3 20*1 50*0	160
41	0	100*0	0	100*0	0
42	10	10*1 90*0	15	5*2 5*1 90*0	12.5
43	300	100*3	300	100*3	300
44	0	100*0	0	100*0	0
45	300	100*3	300	100*3	300
46	190	50*3 20*2 30*0	160	80*2 20*0	175
47			0	100*0	0
48	20	10*2 90*0	20	10*2 90*0	20
49					
50	200	100*2	100	50*2 50*0	150
51	40	20*2 80*0	40	20*2 80*0	40
52	300	100*3	300	100*3	300
53	80	30*2 20*1 50*0	80	30*2 20*1 50*0	80
54	120	60*2 40*0	40	20*2 80*0	80
55	20	20*1 80*0	20	20*1 80*0	20
56	0	100*0	250	50*3 50*2	125
57	160	60*2 40*1			160
58	0	100*0	0	100*0	0
59	0	100*0	0	100*0	0
60			0	100*0	0
61	0	100*0			0

62	300	100*3	300	100*3	300
63	0	100*0	40	20*2 80*0	20
64	120	20*2 80*1			120
65	100	20*3 20*2 60*0			100
66	0	100*0	0	100*0	0
67	0	100*0			0
68	300	100*3	300	100*3	300
69			0	100*0	0
70	200	100*2	200	100*2	200
71	0	100*0	60	30*2 70*0	30
72	300	100*3	300	100*3	300
73	210	50*3 30*2 20*0	280	80*3 20*2	245
74	200	100*2	200	100*2	200
75	0	100*0	0	100*0	0
76	40	20*2 80*0	0	100*0	20
77	200	100*2	200	100*2	200
78	0	100*0	10	10*1 90*0	5
79	0	100*0	0	100*0	0
80	30	10*2 10*1 80*0			30
81	0	100*0	0	100*0	0
82	0	100*0	10	10*1 90*0	5
83	25	5*3 5*2 90*0	0	100*0	12.5
84	300	100*3	300	100*3	300
85			180	80*2 20*1	180
86	300	100*3	300	100*3	300
87	180	80*2 20*1	180	80*2 20*1	180
88	0	100*0	70	20*2 30*1 50*0	35
89	0	100*0	200	100*2	100
90	30	10*2 10*1 80*0	30	10*2 10*1 80*0	30
91	0	100*0	0	100*0	0
92			0	100*0	0
93	0	100*0	0	100*0	0
94	0	100*0	0	100*0	0

Patient	Vimentin IHC score 1	Vimentin % x int.	Vimentin ICH score 2	Vimentin % x int.	Mean Vimentin score
1	0	100*0	0	100*0	0
2	0	100*0	0	100*0	0
3	60	20*3 80*0	60	20*3 80*0	60
4	0	100*0	0	100*0	0
5	0	100*0	0	100*0	0
6			0	100*0	0
7	0	100*0	0	100*0	0
8	0	100*0			0
9			60	20*3 80*0	60
10	0	100*0	0	100*0	0
11			0	100*0	0
12	0	100*0	0	100*0	0
13	240	80*3 20*0			240
14			0	100*0	0
15	0	100*0			0
16	0	100*0			0

17	0	100*0	0	100*0	0
18	0	100*0			0
19	60	20*3 80*0	60	20*3 80*0	60
20	300	100*3	300	100*3	300
21	300	100*3			300
22	0	100*0	0	100*0	0
23	0	100*0	0	100*0	0
24	0	100*0	0	100*0	0
25	60	20*3 80*0	60	20*3 80*0	60
26	60	20*3 80*0	210	70*3 30*0	135
27	0	100*0			0
28	60	20*3 80*0	60	20*3 80*0	60
29					
30	0	100*0	60	20*3 80*0	30
31	0	100*0	0	100*0	0
32	0	100*0	0	100*0	0
33	0	100*0	0	100*0	0
34	150	50*3 50*0	150	50*3 50*0	150
35	0	100*0	0	100*0	0
36			0	100*0	0
37	300	100*3	300	100*3	300
38	0	100*0	0	100*0	0
39					
40	0	100*0	0	100*0	0
41	0	100*0	0	100*0	0
42	0	100*0	0	100*0	0
43	0	100*0	0	100*0	0
44	240	80*3 20*0	240	80*3 20*0	240
45			0	100*0	0
46	150	50*3 50*0	150	50*3 50*0	150
47					
48	0	100*0	0	100*0	0
49					
50	0	100*0	0	100*0	0
51					
52	0	100*0			0
53	90	30*3 70*0	150	50*3 50*0	120
54	240	80*3 20*0	240	80*3 20*0	240
55	0	100*0	0	100*0	0
56	0	100*0	0	100*0	0
57	0	100*0	0	100*0	0
58					
59	240	80*3 20*0	240	80*3 20*0	240
60					
61					
62	0	100*0	0	100*0	0
63	60	20*3 80*0	60	20*3 80*0	60
64	0	100*0			0
65			0	100*0	0
66					
67					
68	0	100*0	0	100*0	0
69	0	100*0			0
70	0	100*0	0	100*0	0
71	90	30*3 70*0	90	30*3 70*0	90
72	150	50*3 50*0	60	20*3 80*0	105

73	0	100*0	0	100*0	0
74	0	100*0	0	100*0	0
75	0	100*0	0	100*0	0
76	0	100*0	0	100*0	0
77					
78			0	100*0	0
79	0	100*0	0	100*0	0
80	150	50*3 50*0			150
81	0	100*0	0	100*0	0
82	0	100*0			0
83	0	100*0	0	100*0	0
84	0	100*0	0	100*0	0
85	0	100*0			0
86	0	100*0	0	100*0	0
87	0	100*0	0	100*0	0
88	240	80*3 20*0	240	80*3 20*0	240
89			0	100*0	0
90	0	100*0	0	100*0	0
91	0	100*0	0	100*0	0
92	0	100*0	0	100*0	0
93	0	100*0	0	100*0	0
94			300	100*3	300

Patient	Gender	Age	Age groups	Smoking status	p16	Localisation
1	male	53.74	50-69	ever	positive	Hypopharynx & Larynx
2	male	54.83	50-69	ever	positive	Oral cavity
3	female	55.77	50-69	ever	negative	Oropharynx
4	male	77.54	>69	never	negative	Hypopharynx & Larynx
5	male	69.65	50-69	ever	positive	Oropharynx
6	male	46.21	<50	never	positive	Oral cavity
7	female	60.12	50-69	ever	negative	Oropharynx
8	male	70.67	>69	ever	positive	Oral cavity
9	male	66.67	50-69	ever	negative	Oropharynx
10	male	82.40	>69	ever	positive	Oral cavity
11	male	52.56	50-69	never	negative	Oropharynx
12	male	51.04	50-69	ever	positive	Oropharynx
13	male	56.00	50-69	ever	positive	Oropharynx
14	male	58.78	50-69	ever	positive	Hypopharynx & Larynx
15	male	64.12	50-69	ever	negative	Oropharynx
16	male	68.62	50-69	ever	positive	Oral cavity
17	male	78.93	>69	never	negative	Oropharynx
18	female	81.33	>69	never	negative	Oral cavity
19	male	58.82	50-69	ever	positive	Hypopharynx & Larynx
20	male	68.88	50-69	never	positive	Oropharynx
21	male	63.19	50-69	ever	positive	Oropharynx
22	male	55.72	50-69	never	negative	Hypopharynx & Larynx
23	male	62.90	50-69	never	positive	Oral cavity
24	male	63.78	50-69	ever	positive	Hypopharynx & Larynx
25	male	65.43	50-69	never	positive	Oropharynx
26	male	52.31	50-69	ever	positive	Oropharynx
27	male	55.98	50-69	ever	negative	Hypopharynx & Larynx
28	male	59.92	50-69	ever	negative	Oropharynx
29	male	47.94	<50	ever	positive	Oropharynx
30	male	53.68	50-69	ever	positive	Hypopharynx & Larynx
31	male	46.00	<50	ever	positive	Oropharynx
32	male	60.18	50-69	ever	positive	Hypopharynx & Larynx
33	male	49.86	<50	ever	positive	Oropharynx
34	male	62.39	50-69	ever	negative	Oral cavity
35	male	56.58	50-69	ever	negative	Oropharynx
36	male	60.85	50-69	ever	negative	Hypopharynx & Larynx
37	male	68.59	50-69	ever	positive	Oral cavity
38	male	57.89	50-69	ever	negative	Hypopharynx & Larynx
39	male	48.00	<50	ever	negative	Oral cavity
40	male	55.32	50-69	ever	positive	Hypopharynx & Larynx
41	male	58.20	50-69	ever	negative	Oropharynx
42	male	45.88	<50	never	negative	Oropharynx
43	female	55.41	50-69	ever	positive	Oral cavity
44	male	65.62	50-69	ever	negative	Hypopharynx & Larynx
45	male	40.50	<50	ever	negative	Oropharynx
46	male	50.05	50-69	ever	positive	Oropharynx
47	female	43.79	<50	never	negative	Oral cavity
48	male	65.47	50-69	ever	negative	Oral cavity
49	male	84.24	>69	ever	positive	Oropharynx
50	male	65.01	50-69	ever	positive	Oral cavity
51	female	41.96	<50	ever	negative	Oral cavity
52	male	53.45	50-69	ever	negative	Oropharynx
53	female	70.71	>69	ever	positive	Oropharynx
54	male	44.39	<50	ever	negative	Oral cavity

55	male	50.19	50-69	ever	negative	Oral cavity
56	male	63.16	50-69	never	negative	Hypopharynx & Larynx
57	male	61.19	50-69	never	negative	Hypopharynx & Larynx
58	male	50.96	50-69	ever	positive	Hypopharynx & Larynx
59	male	52.59	50-69	never	negative	Hypopharynx & Larynx
60	male	67.17	50-69	ever	negative	Oropharynx
61	male	64.79	50-69	ever	negative	Oropharynx
62	male	59.25	50-69	ever	positive	Hypopharynx & Larynx
63	male	57.59	50-69	ever	negative	Hypopharynx & Larynx
64	male	44.02	<50	ever	positive	Oropharynx
65	male	56.64	50-69	ever	positive	Oropharynx
66	male	48.05	<50	ever	negative	Hypopharynx & Larynx
67	male	60.52	50-69	ever	positive	Oral cavity
68	male	51.92	50-69	ever	negative	Oropharynx
69	female	20.68	<50	ever	negative	Oral cavity
70	male	49.64	<50	ever	positive	Hypopharynx & Larynx
71	male	48.93	<50	ever	negative	Oral cavity
72	male	52.84	50-69	ever	negative	Oropharynx
73	male	57.06	50-69	ever	positive	Hypopharynx & Larynx
74	female	54.80	50-69	ever	negative	Oral cavity
75	male	49.80	<50	ever	negative	Oropharynx
76	male	61.99	50-69	ever	negative	Hypopharynx & Larynx
77	female	55.00	50-69	ever	negative	Hypopharynx & Larynx
78	female	82.06	>69	ever	positive	Oral cavity
79	female	88.77	>69	never	positive	Oral cavity
80	male	53.66	50-69	ever	negative	Oral cavity
81	male	70.99	>69	ever	positive	Oral cavity
82	male	45.08	<50	ever	negative	Oral cavity
83	female	64.60	50-69	never	positive	Oropharynx
84	female	49.45	<50	ever	positive	Oropharynx
85	male	53.90	50-69	ever	negative	Oropharynx
86	male	48.92	<50	ever	positive	Oropharynx
87	female	70.72	>69	never	positive	Hypopharynx & Larynx
88	female	66.27	50-69	ever	negative	Oral cavity
89	male	56.14	50-69	ever	negative	Oropharynx
90	male	63.82	50-69	never	negative	Oral cavity
91	male	45.37	<50	ever	negative	Oral cavity
92	male	54.88	50-69	ever	positive	Oropharynx
93	male	69.71	50-69	ever	positive	Oral cavity
94	male	69.22	50-69	ever	negative	Hypopharynx & Larynx

Patient	T Stage	N Stage	Chemotherapy
1	pT2	pN2c	yes
2	pT4a/b	pN2a	yes
3	pT4a/b	pN0	no
4	pT4a/b	pN2b	no
5	pT4a/b	pN2b	no
6	pT4a/b	pN2b	yes
7	pT2	pN2c	yes
8	pT2	pN0	no
9	pT3	pN2b	yes
10	pT4a/b	pN2a	yes
11	pT4a/b	pN1	no
12	pT4a/b	pN2c	yes
13	pT4a/b	pN0	no
14	pT4a/b	pN0	yes
15	pT4a/b	pN2b	yes
16	pT4a/b	pN2b	yes
17	pT4a/b	pN2c	no
18	pT4a/b	pN2c	no
19	pT4a/b	pN3	no
20	pT4a/b	pN2b	yes
21	pT4a/b	pN2c	yes
22	pT4a/b	pN2c	yes
23	pT2	pN0	yes
24	pT4a/b	pN2b	yes
25	pT1	pN3	yes
26	pT4a/b	pN2c	yes
27	pT4a/b	pN2c	yes
28	pT4a/b	pN2c	yes
29	pT4a/b	pN3	yes
30	pT4a/b	pN2c	yes
31	pT4a/b	pN2a	yes
32	pT4a/b	pN2c	yes
33	pT4a/b	pN2b	no
34	pT4a/b	pN2a	yes
35	pT4a/b	pN2c	yes
36	pT1	pN2b	yes
37	pT2	pN0	yes
38	pT4a/b	pN2c	yes
39	pT4a/b	pN0	yes
40	pT4a/b	pN2a	yes
41	pT4a/b	pN2c	yes
42	pT4a/b	pN1	no
43	pT3	pN2a	yes
44	pT4a/b	pN0	yes
45	pT4a/b	pN2c	yes
46	pT4a/b	pN2b	yes
47	pT4a/b	pN0	yes
48	pT4a/b	pN2a	yes
49	pT4a/b	pN2b	yes
50	pT2	pN0	yes
51	pT4a/b	pN2b	yes
52	pT3	pN2c	yes
53	pT4a/b	pN2c	yes
54	pT4a/b	pN1	yes
55	pT4a/b	pN2c	yes

56	pT3	pN2b	yes
57	pT4a/b	pN3	yes
58	pT4a/b	pN2c	yes
59	pT4a/b	pN2a	yes
60	pT2	pN1	yes
61	pT4a/b	pN3	yes
62	pT3	pN2c	yes
63	pT4a/b	pN2c	no
64	pT4a/b	pN2c	no
65	pT4a/b	pN0	yes
66	pT4a/b	pN3	yes
67	pT3	pN1	yes
68	pT4a/b	pN2c	no
69	pT1	pN2a	yes
70	pT3	pN2b	yes
71	pT4a/b	pN2c	yes
72	pT1	pN1	yes
73	pT4a/b	pN2c	no
74	pT3	pN0	yes
75	pT4a/b	pN2b	yes
76	pT3	pN0	yes
77	pT4a/b	pN2b	yes
78	pT3	pN2c	no
79	pT4a/b	pN2a	no
80	pT4a/b	pN2b	yes
81	pT3	pN0	no
82	pT4a/b	pN2c	yes
83	pT4a/b	pN1	yes
84	pT4a/b	pN2b	yes
85	pT4a/b	pN2a	no
86	pT4a/b	pN1	yes
87	pT4a/b	pN2c	yes
88	pT4a/b	pN2c	yes
89	pT4a/b	pN2a	yes
90	pT3	pN1	yes
91	pT4a/b	pN1	yes
92	pT4a/b	pN2c	yes
93	pT3	pN0	yes
94	pT2	pN0	yes