

**Supplementary Table S1.** Patient Sample Summary

Patient	Primary Tumor Site <sup>a</sup>	Sex <sup>b</sup>	Age	T <sup>c</sup>	N <sup>c</sup>	M <sup>c</sup>	Sample Set No.	Tissue Profiled <sup>d</sup>	Array Type
1	Oropharynx/tonsil	M	67	3	2	0	1	N-P-M	HuGeneFL
2	Oropharynx/tonsil	M	47	4	2	0	2	N-P-M	HuGeneFL
3	Hypopharynx/pyriform sinus	M	64	3	2	0	3	N-P-M	HuGeneFL
							13	N-P	HuGeneFL
5	Larynx/subglottis	M	76	4	2	0	5	N-P-M	HuGeneFL
6	Pharynx	M	50	NA	NA	NA	6	N-P-M	HuGeneFL
7	Larynx/supraglottis	M	48	2	3	0	7	N-P-M	HuGeneFL
8	Oral cavity/tongue	M	65	3	2	0	8	N-P-M	HuGeneFL
9	Oral cavity/tongue	M	45	3	1	0	9	N-P-M	HuGeneFL
10	Oropharynx/tonsil	M	54	1	2	0	10	N-P-M	HuGeneFL
11	Larynx/glottis	M	64	4	1	0	11	N-P-M	HuGeneFL
12	Oropharynx/BOT	M	53	3	1	0	12	N-P-M	HuGeneFL
14	Oropharynx/BOT	M	49	4	0	0	14	N-P	U95Av2
15	Larynx/supraglottis	F	54	2	1	0	15	N-P-M	U95Av2
16	Oral cavity/tongue	F	78	3	2	0	16	N-P-M	U95Av2
17	Oropharynx/tonsil	M	47	2	2	0	17	N-P-M	U95Av2
18	Larynx/supra	M	56	3	0	0	18	N-P	U95Av2
19	Larynx/glottis	M	54	4	0	0	19	N-P	U95Av2
20	Larynx/glottis	M	63	3	0	0	20	N-P	U95Av2
21	Larynx/glottis	M	59	2	0	0	21	N-P	U95Av2
22	Hypopharynx/pyriformis	M	56	2	3	0	22	N-P	U95Av2
23	Hypopharynx/pyriformis	M	61	3	2	0	23	N-P	U95Av2
24	Hypopharynx/cricoid	F	62	3	1	0	24	N-P	U95Av2
27	Oral cavity/tongue	M	67	2	0	0	27	N-P	U95Av2
28	Oropharynx/palate	M	69	1	0	0	28	N-P	U95Av2
29	Oropharynx/tonsil	F	70	2	1	0	29	N-P	U95Av2
30	Oral cavity/tongue	M	30	3	0	0	30	N-P	U95Av2
31	Oropharynx/BOT	M	51	4	0	0	31	N-P	U95Av2

<sup>a</sup>BOT, base of tongue. <sup>b</sup>M, male; F, female. <sup>c</sup>NA, not available. <sup>d</sup>N, normal adjacent tissue; P, primary tumor; M, metastatic lymph node.