

Table 1:

Position	Age	Sex	Organ	Pathology diagnosis	TNM	Grade	Stage
A1 ^a	61	F	Tongue	Squamous cell carcinoma of palate	T1N0M0	1	I
A2 ^a	61	M	Tongue	Squamous cell carcinoma of lower lip	T1N0M0	1	I
A3 ^a	77	M	Tongue	Squamous cell carcinoma of lower lip	T1N0M0	1	I
A4 ^a	75	F	Tongue	Squamous cell carcinoma of upper jaw (chronic inflammation of fibrous tissue and blood vessel)	T1N0M0	-	I
A5 ^a	55	M	Tongue	Squamous cell carcinoma of tongue	T1N0M0	1	I
A6 ^a	67	M	Tongue	Squamous cell carcinoma of right palate	T2N0M0	1	II
A7 ^a	67	M	Larynx	Squamous cell carcinoma of larynx	T2N0M0	1	II
A8 ^a	70	M	Nose	Squamous cell carcinoma of right maxillary sinus (fibrous tissue and blood vessel)	T2N0M0	-	II
A9 ^a	40	M	Larynx	Squamous cell carcinoma of larynx	T2N1M1	2	IV
A10 ^a	55	M	Larynx	Squamous cell carcinoma of epiglottis	T4N0M0	2	IV
B1 ^a	57	M	Tongue	Squamous cell carcinoma of pharynx	T4N0M0	2	IV
B2 ^a	49	M	Tongue	Squamous cell carcinoma of left gingiva	T4N0M0	1	IV
B3 ^a	50	M	Tongue	Squamous cell carcinoma of root of tongue	T3N0M0	2	III
B4 ^a	54	M	Tongue	Squamous cell carcinoma of left upper jaw	T3N0M0	2	III
B5 ^a	72	M	Larynx	Squamous cell carcinoma of larynx	T2N0M0	2	II
B6 ^a	50	M	Tongue	Squamous cell carcinoma of tongue (sublingual gland tissue)	T2N0M0	-	II
B7 ^a	74	M	Nose	Squamous cell carcinoma of nasal root	T2N0M0	2	II
B8 ^a	49	M	Larynx	Squamous cell carcinoma of larynx	T4N1M0	2	IV
B9 ^a	50	M	Larynx	Squamous cell carcinoma of larynx	T2N1M0	2	III
B10 ^a	90	M	Tongue	Squamous cell carcinoma of cheek	T2N0M0	2	II
C1 ^a	67	M	Larynx	Squamous cell carcinoma of larynx	T3N1M0	2	III
C2 ^a	56	M	Larynx	Squamous cell carcinoma of epiglottis	T4N0M0	2	IV
C3 ^a	66	M	Larynx	Squamous cell carcinoma of left laryngeal pharynx (sparse)	T3N2M0	2	IV
C4 ^a	58	M	Larynx	Squamous cell carcinoma of larynx	T3N1M1	2	IV
C5 ^a	60	M	Tongue	Squamous cell carcinoma of tongue	T2N0M0	3	II
C6 ^a	67	M	Larynx	Squamous cell carcinoma of sinus piriformis	T2N0M0	3	II
C7 ^a	56	F	Nose	Squamous cell carcinoma of nasopharynx	T2N0M0	3	II
C8 ^a	48	M	Tongue	Squamous cell carcinoma of left submaxilla	T2N0M0	1	II
C9 ^a	56	M	Larynx	Squamous cell carcinoma of laryngeal pharynx	T2N0M0	2	II
C10 ^a	43	M	Tongue	Squamous cell carcinoma of right submaxilla	T2N0M0	2	II
D1 ^a	70	M	Tongue	Squamous cell carcinoma of gingiva of right submaxilla	T2N0M0	2	II
D2 ^a	61	F	Tongue	Squamous cell carcinoma of left submaxilla	T2N0M0	2	II
D3 ^a	56	F	Tongue	Squamous cell carcinoma of mouth floor	T2N0M0	2	II
D4 ^a	55	M	Larynx	Squamous cell carcinoma of larynx	T3N1M0	2	III
D5 ^a	50	M	Larynx	Squamous cell carcinoma of larynx	T3N1M0	2	III
D6 ^a	49	M	Larynx	Squamous cell carcinoma of larynx	T2N1M0	3	III
D7 ^a	71	M	Larynx	Squamous cell carcinoma of epiglottis	T3N1M0	2	III
D8 ^a	50	F	Larynx	Squamous cell carcinoma of laryngeal pharynx	T2N1M0	2	III
D9 ^a	58	M	Larynx	Squamous cell carcinoma of sinus piriformis	T3N0M0	2	III
D10 ^a	71	M	Larynx	Squamous cell carcinoma of laryngeal pharynx	T2N1M0	2	III

E1 ^a	61	M	Larynx	Squamous cell carcinoma of epiglottis	T2N1M0	2	III
E2 ^a	44	M	Nose	Squamous cell carcinoma of laryngeal pharynx	T2N1M0	2	III
E3 ^a	61	M	Larynx	Squamous cell carcinoma of larynx	T3N0M0	2	III
E4 ^a	45	M	Tongue	Squamous cell carcinoma of right cheek	T2N0M0	3	II
E5 ^a	47	M	Larynx	Squamous cell carcinoma of larynx	T2N0M0	2	II
E6 ^a	63	M	Larynx	Squamous cell carcinoma of epiglottis	T3N1M0	2	III
E7 ^a	61	M	Larynx	Squamous cell carcinoma of epiglottis	T2N0M0	3	II
E8 ^a	75	M	Tongue	Squamous cell carcinoma of maxillary sinus	T4N0M0	3	IV
E9 ^a	50	M	Nose	Squamous cell carcinoma of sinus piriformis	T2N0M0	3	II
E10 ^a	64	M	Larynx	Squamous cell carcinoma of larynx	T2N0M0	3	II
F1 ^a	38	F	Tongue	Squamous cell carcinoma of lower lip	T2N0M0	3	II
F2 ^a	56	F	Tongue	Squamous cell carcinoma of cheek	T3N0M0	3	III
F3 ^a	42	F	Nose	Squamous cell carcinoma of nasal sinus	T3N0M0	3	III
F4 ^a	47	M	Larynx	Squamous cell carcinoma of larynx (mixed gland tissue)	T2N1M0	-	III
F5 ^a	51	M	Larynx	Squamous cell carcinoma of larynx (sparse)	T2N1M0	2	III
F6 ^a	58	M	Larynx	Squamous cell carcinoma of sinus piriformis with necrosis	T2N2M0	3	IV
F7 ^a	74	M	Larynx	Squamous cell carcinoma of laryngeal pharynx with necrosis	T4N0M0	3	IV
F8 ^a	48	M	Larynx	Squamous cell carcinoma of laryngeal pharynx	T4N0M0	2	IV
F9 ^a	65	M	Larynx	Squamous cell carcinoma of larynx	T3N2M0	3	IV
F10 ^a	75	M	Nose	Squamous cell carcinoma of nasal sinus	T4N0M0	3	IV
G1 ^a	32	F	Tongue	Carcinoma sarcomatodes of maxillary sinus	T2N0M0	-	II
G2 ^b	40	F	Tongue	Metastatic mucoepidermoid carcinoma of neck	-	3	-
G3 ^b	67	M	Tongue	Metastatic mucoepidermoid carcinoma of base of tongue	-	3	-
G4 ^b	55	M	Tongue	Metastatic squamous cell carcinoma of left upper gingiva	-	2	-
G5 ^b	47	M	Tongue	Metastatic squamous cell carcinoma of oral cavity	-	1	-
G6 ^b	49	M	Tongue	Metastatic squamous cell carcinoma of hypoglottis	-	2	-
G7 ^b	53	M	Tongue	Metastatic squamous cell carcinoma of laryngeal pharynx	-	3	-
G8 ^b	43	M	Tongue	Metastatic acinic cell carcinoma of neck	-	3	-
G9 ^b	52	F	Tongue	Metastatic acinic cell carcinoma of neck	-	1	-
G10 ^d	38	M	Tongue	Cancer adjacent normal tongue tissue	-	-	-
H1 ^c	28	M	Tongue	Normal tongue tissue	-	-	-
H2 ^c	27	F	Tongue	Normal tongue tissue	-	-	-
H3 ^c	48	M	Tongue	Normal tongue tissue	-	-	-
H4 ^d	42	F	Tongue	Cancer adjacent normal tongue tissue	-	-	-
H5 ^c	15	F	Tongue	Normal tongue tissue	-	-	-
H6 ^c	19	F	Tongue	Normal tongue tissue	-	-	-
H7 ^c	35	M	Tongue	Normal tongue tissue	-	-	-
H8 ^c	18	F	Tongue	Normal tongue tissue	-	-	-
H9 ^c	19	F	Tongue	Normal tongue tissue	-	-	-
H10 ^c	28	M	Tongue	Normal pharynx tissue	-	-	-

a: malignant tissues, b: metastatic tissues, c: Normal tissues, d: Normal adjacent tissue

Table 2:

Position	Age	Sex	Organ	Pathology diagnosis	TNM	Grade	Stage
A1 ^a	40	M	Gingiva	Squamous cell carcinoma	T4N0M0	1	IV
A2 ^a	47	F	Tongue	Squamous cell carcinoma	T1N0M0	1	I
A3 ^a	81	M	Lip	Squamous cell carcinoma	T2N0M0	1	II
A4 ^a	57	M	Tongue	Squamous cell carcinoma	T1N0M0	1	I
A5 ^a	52	F	Lip	Squamous cell carcinoma	T1N0M0	2	I
A6 ^a	53	M	Cheek	Squamous cell carcinoma	T2N0M0	1	II
A7 ^a	62	F	Cheek	Squamous cell carcinoma	T1N0M0	1	I
A8 ^a	48	M	Base of tongue	Squamous cell carcinoma	T2N0M0	-	II
A9 ^a	68	M	Right palate	Squamous cell carcinoma	T2N0M0	1	II
A10 ^a	56	F	Cheek	Squamous cell carcinoma	T2N0M0	1	II
B1 ^a	79	M	Cheek	Squamous cell carcinoma	T2N0M0	1	II
B2 ^a	60	M	Gingiva	Squamous cell carcinoma	T1N0M0	1	I
B3 ^a	55	M	Cheek	Squamous cell carcinoma	T1N0M0	1	I
B4 ^a	66	M	Tongue	Squamous cell carcinoma	T1N0M0	1	I
B5 ^a	46	F	Tongue	Squamous cell carcinoma	T1N0M1	1	IV
B6 ^a	39	F	Tongue	Squamous cell carcinoma	T1N0M0	1	I
B7 ^a	78	M	Tongue	Squamous cell carcinoma	T2N0M0	1	II
B8 ^a	78	F	Lip	Squamous cell carcinoma	T1N0M1	1	IV
B9 ^a	54	F	Lip	Squamous cell carcinoma	T1N0M1	1	IV
B10 ^a	75	F	Lip	Squamous cell carcinoma	T1N0M1	1	IV
C1 ^a	60	M	Tongue	Squamous cell carcinoma	T1N0M0	1	I
C2 ^a	73	M	Lip	Squamous cell carcinoma	T1N0M0	1	I
C3 ^a	60	M	Gingiva	Squamous cell carcinoma	T1N0M0	2	I
C4 ^a	78	M	Lip	Squamous cell carcinoma	T1N0M0	2	I
C5 ^a	55	M	Gingiva	Squamous cell carcinoma	T1N0M0	2--3	I
C6 ^a	47	M	Lower mandible	Squamous cell carcinoma	T2N0M0	3	II
C7 ^a	41	M	Dental alveoli	Squamous cell carcinoma	T1N0M0	3	I
C8 ^a	60	M	Tongue	Squamous cell carcinoma	T2N0M0	3	II
C9 ^a	40	F	Palate	Adenoid cystic carcinoma	T1N0M0	-	I
C10 ^a	45	M	Left lower mandible	Adenoid cystic carcinoma (sparse)	T1N0M0	-	I
D1 ^a	64	M	Palate	Adenoid cystic carcinoma	T2N0M0	-	II
D2 ^a	66	M	Parotid gland	Acinic cell carcinoma	T2N0M0	-	II
D3 ^a	71	M	Mouth floor	Mucoepidermoid carcinoma	T1N0M0	1	I
D4 ^a	57	M	Palate	Mucoepidermoid carcinoma	T2N0M0	1	II
D5 ^a	50	F	Cheek	Mucoepidermoid carcinoma	T2N0M0	1	II
D6 ^a	57	M	Upper lip	Mucoepidermoid carcinoma (skeletal muscle and blood vessel)	T1N0M0	-	I
D7 ^a	48	F	Right lower mandible	Mucoepidermoid carcinoma	T1N0M0	2	I
D8 ^a	55	M	Gingiva	Mucoepidermoid carcinoma	T1N0M0	3	I

D9 ^a	60	M	Right lower mandible	Mucoepidermoid carcinoma	T3N0M0	3	III
D10 ^a	50	M	Root of tongue	Mucoepidermoid carcinoma (sparse)	T1N0M0	-	I
E1 ^a	79	F	Lip	Basal cell carcinoma (sparse)	T2N0M0	-	II
E2 ^a	48	F	Lip	Basal cell carcinoma	T2N0M0	-	II
E3 ^b	70	F	Lymph node	Metastatic squamous cell carcinoma of neck from cheek	-	2	-
E4 ^b	79	M	Lymph node	Metastatic squamous cell carcinoma of neck from tongue	-	1	-
E5 ^b	59	F	Lymph node	Metastatic squamous cell carcinoma of neck from mandible	-	2	-
E6 ^b	40	F	Lymph node	Metastatic mucoepidermoid carcinoma of neck from mandible	-	3	-
E7 ^c	11	M	Mandible	Adamantinoma	-	-	-
E8 ^c	28	M	Left mandible	Adamantinoma	-	-	-
E9 ^c	51	M	Right mandible	Adamantinoma	-	-	-
E10 ^c	64	M	Mandible	Adamantinoma (fibrous tissue and blood vessel)	-	-	-
F1 ^e	37	F	Mandible	Adamantinoma	-	-	-
F2 ^e	40	M	Lower mandible	Adamantinoma	-	-	-
F3 ^e	47	F	Mandible	Adamantinoma	-	-	-
F4 ^e	70	F	Right jaw bones	Adamantinoma	-	-	-
F5 ^f	67	M	Lip	Hyperplasia of squamous epithelium	-	-	-
F6 ^f	40	M	Lip	Mild atypical hyperplasia of squamous epithelium	-	-	-
F7 ^f	82	M	Lip	Hyperplasia of squamous epithelium	-	-	-
F8 ^f	46	M	Tongue	Hyperplasia of squamous epithelium (skeletal muscle and blood vessel)	-	-	-
F9 ^f	60	F	Tongue	Hyperplasia of squamous epithelium	-	-	-
F10 ^f	3	F	Tongue	Hyperplasia of squamous epithelium	-	-	-
G1 ^g	68	M	Parotid gland	Cancer adjacent tissue (with squamous cell carcinoma sparse)	-	-	-
G2 ^g	53	F	Tongue	Cancer adjacent tissue	-	-	-
G3 ^g	53	M	Tongue	Cancer adjacent tissue (hyperplasia of squamous epithelium)	-	-	-
G4 ^g	70	M	Parotid gland	Cancer adjacent tissue (with mucoepidermoid carcinoma)	-	2	-
G5 ^g	63	M	Lip	Cancer adjacent tissue (chronic inflammation of fibrous tissue and blood vessel)	-	-	-
G6 ^h	43	M	Sub maxillary gland	Chronic submaxillaritis	-	-	-
G7 ^h	23	F	Parotid gland	Chronic parotitis	-	-	-
G8 ^h	66	F	Parotid gland	Chronic parotitis	-	-	-
G9 ^h	40	F	Right cheek	Chronic inflammation of mucosa	-	-	-

G10 ^h	75	F	Lower lip	Chronic inflammation of mucosa of No. 20	-	-	-
H1 ^d	48	F	Salivary gland	Cancer adjacent normal salivary gland tissue	-	-	-
H2 ^d	48	F	Salivary gland	Cancer adjacent normal salivary gland tissue	-	-	-
H3 ^d	37	M	Salivary gland	Cancer adjacent normal salivary gland tissue	-	-	-
H4 ^d	63	M	Salivary gland	Cancer adjacent normal salivary gland tissue	-	-	-
H5 ^d	56	M	Salivary gland	Cancer adjacent normal salivary gland tissue	-	-	-
H6 ^c	42	F	Tongue	Normal tongue tissue	-	-	-
H7 ^c	38	F	Salivary gland	Normal salivary gland tissue	-	-	-
H8 ^c	48	M	Tongue	Normal tongue tissue	-	-	-
H9 ^c	50	M	Salivary gland	Normal salivary gland tissue	-	-	-
H10 ^c	22	M	Salivary gland	Normal salivary gland tissue	-	-	-

a: malignant tissues, b: metastatic tissues, c: Normal tissues, d: Normal adjacent tissue, e: benign tissues, f: hyperplastic tissues, g: cancer adjacent tissue, h: inflammation

Table 3:

S. No	Clone	Sequence
1	TRCN0000372769	CCGGCAATTCTCAGAGAAGACAAAGCTCGAGCTTTGT CTTCTCTGAGAATTGTTTTTG
2	TRCN0000378896	CCGGGAGTGGTGAGCACCAACTACACTCGAGTG TAG TTGGTGCTCACC ACTCTTTTTG
3	TRCN0000372827	CCGGGGAGCTGACTTCGGA ACTAACTCGAGTTTAGT TCCGAAGTCAGCTCCTTTTTG
4	TRCN0000060288	CCGGGCTGGGCAACATTAAGAGTTACTCGAGTAACTC TTAATGTTGCC CAGCTTTTTG
5	TRCN0000060289	CCGGCCAGCATGCTATGGTGTTCTTCTCGAGAAGAAC ACCATAGCATGCTGGTTTTTG
6	SHC204	CCGGCGTGATCTTCACCGACAAGATCTCGAGATCTTG TCGGTGAAGATCTTTTT

Table 4:

Gene		Primers	T _m (°C)	Amplicon Size
NGAL	F	5' ATGCCCCTAGGTCTCCTGT 3'	55 °C	597bp
	R	5' T C A G C C G T C G A T A C A C T G 3'		
LKB1	F	TCAAAATCTCCGACCTGGGC	55 °C	570bp
	R	TGTGACTGGCCTCCTCTTCT		
AMPK	F	CGGCAAAGTGAAGGTTGGCAA	59 °C	227bp
	R	CAAATAGCTCTCCTCCTGAGAC		
P53	F	CTGCCCTCAACAAGATGTTTTG	55 °C	172bp
	R	CTATCTGAGCAGCGCTCATGG		
Redd-1	F	CTGATGCCTAGCCAGTTGGT	55 °C	233bp
	R	GAGCTAAACAGCCCCTGGAT		
Caspase-3	F	ATGGAGAACACTGAAAACTCAGTGGATT	65 °C	782bp
	R	CCACCAACCAACCATTCTTTAGTG		
GAPDH	F	AGG TCG GAG TCA ACG GAT TTG	60 °C	532bp
	R	GTG ATG GCA TGG ACT GTG GT		