

Supplementary Tables: Table S1. Clinical information associated with HNSCC tissue specimens used for metabolomic profiling

Sample ID	Sex	Age	Ethnicity	Specimen type	Diagnosis	Biosample histological diagnosis	Grade	TNM	Stage	Metastases	Date of surgery
A1	M	57	caucasian		NAT	NAT					
B1				larynx	cancer	squamous cell carcinoma	G2	T2N2bM0	IVA		8/6/2008
C1				lymph node	metastases	metastatic squamous cell carcinoma				5/10 lymph nodes	
A2	M	64	caucasian		NAT	NAT					
B2				larynx	cancer	squamous cell carcinoma	G3	T2N2bM0	IVA	2/6 lymph nodes	9/3/2008
C2				lymph node	metastases	metastatic squamous cell carcinoma					
A3	M	53	caucasian		NAT	NAT					
B3				larynx	cancer	squamous cell carcinoma	G2	T2N2bM0	IVA	2/7 lymph nodes	2/26/2007
C3				lymph node	metastases	metastatic squamous cell carcinoma					
A4	M	56	Caucasian	larynx	normal	NAT					
B4				larynx	cancer	squamous cell carcinoma	G3	T2N2M0	IVA	5/11 lymph nodes	7/18/2012
C4				lymph nodes	metastases	metastatic squamous cell carcinoma					
A5	M	54	Caucasian	larynx	normal	NAT					
B5				larynx	cancer	squamous cell carcinoma	G1	T3N2M0	IVA	12/37 lymph nodes	10/5/2012
C5				lymph nodes	metastases	metastatic squamous cell carcinoma					
A6	M	59	Caucasian	tongue	normal	NAT					
B6				tongue	cancer	squamous cell carcinoma	G3	T4aN1M0	IVA	1/9 lymph nodes	5/11/2012
C6				lymph nodes	metastases	metastatic squamous cell carcinoma					
A7	M	63	Caucasian	laryngopharynx	normal	NAT					
B7				laryngopharynx	cancer	squamous cell carcinoma	G3	T3N2M0	IVA	9/9 lymph nodes	10/18/2012
C7				lymph nodes	metastases	metastatic squamous cell carcinoma					
A8	M	71	Caucasian		NAT	NAT					
B8				larynx	tumor	squamous cell carcinoma	G2	T4aN2bM0	IVA	2/8 lymph nodes	11/16/2011
C8				lymph node	metastasis	metastatic squamous cell carcinoma					
A9	M	60	Caucasian		NAT	NAT					
B9				hypopharynx	tumor	squamous cell carcinoma	G3	T3N2bM0	IVA	3/7 lymph nodes	7/18/2011
C9				lymph node	metastasis	metastatic squamous cell carcinoma					
A10	M	53	Caucasian		NAT	NAT					
B10				larynx	tumor	squamous cell carcinoma	G3	T4aN2cM0	IVA	2/19 lymph nodes	5/23/2011
C10				lymph node	metastasis	metastatic squamous cell carcinoma					
A11	M	61	Caucasian		NAT	NAT					
B11				larynx	tumor	squamous cell carcinoma	G2	T3N2cM0	IVA	5/19 lymph nodes	12/10/2010
C11				lymph node	metastasis	metastatic squamous cell carcinoma					
A12	M	60	Caucasian		NAT	NAT					
B12				larynx	cancer	squamous cell carcinoma	G3	T4aN2bM0	IVA	6/9 lymph nodes	3/15/2012

C12				lymph node	metastases	metastatic squamous cell carcinoma					
A13	M	57	Caucasian		NAT	NAT					
B13				larynx	cancer	squamous cell carcinoma	G2	T3N2aM0	IVA	1/14 lymph nodes	5/29/2013
C13				lymph node	metastases	metastatic squamous cell carcinoma					
A14	M	54	Caucasian		NAT	NAT					
B14				larynx	cancer	squamous cell carcinoma	G1	T4aN2cM0	IVA	12/34 lymph nodes	10/5/2012
C14				lymph node	metastases	metastatic squamous cell carcinoma					
A15	M	56	Caucasian		NAT	NAT					
B15				larynx	cancer	squamous cell carcinoma	G3	T4aN2bM0	IVA	4/10 lymph nodes	8/2/2010
C15				nasal cavity	metastases	metastatic squamous cell carcinoma		recurrent	N/A	nasal cavity	7/21/2011
A16	M	45	Caucasian	tongue	NAT	NAT					
B16				tongue	cancer	squamous cell carcinoma	G2	T3N2bM0	IVA	5/12 lymph nodes	1/30/2013
C16				lymph node	metastases	metastatic squamous cell carcinoma					
A17	M	50	Caucasian	tongue	NAT	NAT					
B17				tongue	cancer	squamous cell carcinoma	G1-2	T2N2bM0	IVA	2/21 lymph nodes	4/15/2013
C17				lymph node	metastases	metastatic squamous cell carcinoma					
A18	M	63	Caucasian	mouth floor mucosa	NAT	NAT					
B18				mouth floor mucosa	cancer	squamous cell carcinoma	G1-2	T4aN1M0	IVA	1/15 lymph nodes	2/19/2014
C18				lymph node	metastases	metastatic squamous cell carcinoma					
A19	M	57	Caucasian	larynx	NAT	NAT					
B19				larynx	cancer	squamous cell carcinoma	G2	T2N1M0	III	1/14 lymph nodes	5/29/2013
C19				lymph node	metastases	metastatic squamous cell carcinoma					

Matched sets

Normal: A1-A19

Primary HNSCC: B1-B19

Metastatic tissue: C1-C19

Supplementary Tables: Table S2. Clinical information associated with HNSCC saliva specimens used for metabolomic profiling

Sample ID	Sex	Age	Ethnicity/Race	Specimen type	Diagnosis	Biosample histological diagnosis	TNM	Stage	Survival
D3426	M	49	Caucasian	saliva	normal				
D3493	F	49	Caucasian	saliva	normal				
D3529	F	55	Caucasian	saliva	normal				
D3530	F	60	Caucasian	saliva	normal				
D3531	F	63	Caucasian	saliva	normal				
D3532	M	49	Caucasian	saliva	normal				
D3533	M	65	Caucasian	saliva	normal				
D3534	M	50	Caucasian	saliva	normal				
D3508	M	57	Caucasian	saliva	normal				
D3535	M	54	Caucasian	saliva	normal				
1702	F	62	European/American/White	saliva	cancer	oral cavity	T3N0M0	III	9.1
1707	F	44	European/American/White	saliva	cancer	oropharynx	T1N0M0	IV	60.3
1708	M	63	European/American/White	saliva	cancer	oral cavity	T1N1M0	III	57.4
1711	M	50	European/American/White	saliva	cancer	larynx	T1N0M0	I	60.8
1719	M	57	European/American/White	saliva	cancer	larynx	T2N0M0	II	18.1
1770	M	41	European/American/White	saliva	cancer	oropharynx	T2N2M1	IV	38.6
1886	M	83	European/American/White	saliva	cancer	unknown primary	TxN2aM0	IV	48
1893	M	47	European/American/White	saliva	cancer	oral cavity	T3N2bM0	IV	22.2
1894	M	61	European/American/White	saliva	cancer	larynx	T3N2M0	III	48.1
1895	M	68	European/American/White	saliva	cancer	larynx	T3N3M0	IV	1.8
1896	M	43	European/American/White	saliva	cancer	oropharynx	T1N2bM0	IV	51.1
1897	M	65	European/American/White	saliva	cancer	unknown primary	TxN2cM0	IV	47.8
1905	M	68	European/American/White	saliva	cancer	hypopharynx	T1N3M0	IV	47.2
1906	M	49	European/American/White	saliva	cancer	hypopharynx	T2N3M1	IV	9
1919	M	47	European/American/White	saliva	cancer	oropharynx	T1N2aM0	IV	46.2
1923	F	76	African American/Black	saliva	cancer	oral cavity	T4N0M0	IV	9.2
1925	M	74	European/American/White	saliva	cancer	hypopharynx	T4N2cM0	IV	26.5
1928	M	53	European/American/White	saliva	cancer	larynx	T4N0M0	IV	50.3
1929	M	58	European/American/White	saliva	cancer	oropharynx	T4N2bM0	IV	48.6
1931	M	40	European/American/White	saliva	cancer	larynx	T4N2cM0	IV	48.8
1932	M	81	European/American/White	saliva	cancer	larynx	T1bN0M0	I	48.5
1940	M	54	European/American/White	saliva	cancer	larynx	T3N2bM0	IV	4.5

1950	M	43	European/American/White	saliva	cancer	oropharynx	T2N1M0	III	48.6
1954	M	54	European/American/White	saliva	cancer	layrnx	T3N2cM0	IV	48.2
1961	M	62	European/American/White	saliva	cancer	unknown primary	TxN2M0	IV	48
1989	M	63	European/American/White	saliva	cancer	oral cavity	T1NoM0	I	47.9
2022	F	68	European/American/White	saliva	cancer	hypopharynx	T3N0M0	III	1.1
2024	M	48	European/American/White	saliva	cancer	unknown primary	TxN2M0	IV	49.1
2026	M	73	European/American/White	saliva	cancer	oropharynx	T2N2cM0	IV	26.8
2029	M	53	European/American/White	saliva	cancer	layrnx	T1N0M0	I	49.1
2062	M	63	European/American/White	saliva	cancer	layrnx	T2N2bM0	IV	20
2067	M	50	European/American/White	saliva	cancer	oral cavity	T4N0M0	IV	49.4
2077	F	74	European/American/White	saliva	cancer	oral cavity	T2N1M0	III	49.1
2080	F	54	European/American/White	saliva	cancer	oral cavity	T2N1M0	III	47.8
2083	M	76	European/American/White	saliva	cancer	hypopharynx	T3N0M1	IV	1.4
2084	M	48	European/American/White	saliva	cancer	layrnx	T2N0M1	II	40
2101	M	84	European/American/White	saliva	cancer	oral cavity	T2N0M0	II	48.5
2119	M	81	European/American/White	saliva	cancer	oral cavity	T1N0M0	I	39.1
2120	M	34	European/American/White	saliva	cancer	oral cavity	T2N0M0	II	48.2
2163	M	69	European/American/White	saliva	cancer	oral cavity	TxN0M0	I	49.5
2193	M	68	European/American/White	saliva	cancer	oral cavity	T1N0M0	I	48.4
2200	F	71	European/American/White	saliva	cancer	oral cavity	T1N0M0	I	36.5
2212	M	48	European/American/White	saliva	cancer	oral cavity	T1N0M0	I	48.4
2224	M	79	European/American/White	saliva	cancer	layrnx	T1aN0M0	I	36.5
2314	M	40	European/American/White	saliva	cancer	oral cavity	T2N0M0	II	36.5
2334	M	68	European/American/White	saliva	cancer	oral cavity	T2N0M0	II	37.3
2338	M	63	European/American/White	saliva	cancer	nasopharynx	T2N0M0	II	11.2

Supplementary Tables: Table S3. Clinical information associated with HNSCC tissue specimens used for metabolomic validation

Sample ID	Sex	Age	Ethnicity	Specimen type	Diagnosis	Biosample histological diagnosis	Grade	TNM	Stage	Metastases	Date of surgery
A1	M	57	caucasian		NAT	NAT					
B1				larynx	cancer	squamous cell carcinoma	G2	T2N2bM0	IVA		8/6/2008
C1				lymph node	metastases	metastatic squamous cell carcinoma				5/10 lymph nodes	
A2	M	64	caucasian		NAT	NAT					
B2				larynx	cancer	squamous cell carcinoma	G3	T2N2bM0	IVA	2/6 lymph nodes	9/3/2008
C2				lymph node	metastases	metastatic squamous cell carcinoma					
A3	M	53	caucasian		NAT	NAT					
B3				larynx	cancer	squamous cell carcinoma	G2	T2N2bM0	IVA	2/7 lymph nodes	2/26/2007
C3				lymph node	metastases	metastatic squamous cell carcinoma					
A4	M	56	Caucasian	larynx	normal	NAT					
B4				larynx	cancer	squamous cell carcinoma	G3	T2N2M0	IVA	5/11 lymph nodes	7/18/2012
C4				lymph nodes	metastases	metastatic squamous cell carcinoma					
A5	M	54	Caucasian	larynx	normal	NAT					
B5				larynx	cancer	squamous cell carcinoma	G1	T3N2M0	IVA	12/37 lymph nodes	10/5/2012
C5				lymph nodes	metastases	metastatic squamous cell carcinoma					
A6	M	59	Caucasian	tongue	normal	NAT					
B6				tongue	cancer	squamous cell carcinoma	G3	T4aN1M0	IVA	1/9 lymph nodes	5/11/2012
C6				lymph nodes	metastases	metastatic squamous cell carcinoma					
A7	M	63	Caucasian	laryngopharynx	normal	NAT					
B7				laryngopharynx	cancer	squamous cell carcinoma	G3	T3N2M0	IVA	9/9 lymph nodes	10/18/2012
C7				lymph nodes	metastases	metastatic squamous cell carcinoma					
A8	M	71	Caucasian		NAT	NAT					
B8				larynx	tumor	squamous cell carcinoma	G2	T4aN2bM0	IVA	2/8 lymph nodes	11/16/2011
C8				lymph node	metastasis	metastatic squamous cell carcinoma					
A9	M	60	Caucasian		NAT	NAT					
B9				hypopharynx	tumor	squamous cell carcinoma	G3	T3N2bM0	IVA	3/7 lymph nodes	7/18/2011
C9				lymph node	metastasis	metastatic squamous cell carcinoma					
A10	M	53	Caucasian		NAT	NAT					
B10				larynx	tumor	squamous cell carcinoma	G3	T4aN2cM0	IVA	2/19 lymph nodes	5/23/2011
C10				lymph node	metastasis	metastatic squamous cell carcinoma					
A11	M	61	Caucasian		NAT	NAT					
B11				larynx	tumor	squamous cell carcinoma	G2	T3N2cM0	IVA	5/19 lymph nodes	12/10/2010
C11				lymph node	metastasis	metastatic squamous cell carcinoma					
A12	M	60	Caucasian		NAT	NAT					
B12				larynx	cancer	squamous cell carcinoma	G3	T4aN2bM0	IVA	6/9 lymph nodes	3/15/2012

C12				lymph node	metastases	metastatic squamous cell carcinoma					
A13	M	57	Caucasian		NAT	NAT					
B13				larynx	cancer	squamous cell carcinoma	G2	T3N2aM0	IVA	1/14 lymph nodes	5/29/2013
C13				lymph node	metastases	metastatic squamous cell carcinoma					
A14	M	54	Caucasian		NAT	NAT					
B14				larynx	cancer	squamous cell carcinoma	G1	T4aN2cM0	IVA	12/34 lymph nodes	10/5/2012
C14				lymph node	metastases	metastatic squamous cell carcinoma					
A15	M	56	Caucasian		NAT	NAT					
B15				larynx	cancer	squamous cell carcinoma	G3	T4aN2bM0	IVA	4/10 lymph nodes	8/2/2010
C15				nasal cavity	metastases	metastatic squamous cell carcinoma		recurrent	N/A	nasal cavity	7/21/2011
A16	M	45	Caucasian	tongue	NAT	NAT					
B16				tongue	cancer	squamous cell carcinoma	G2	T3N2bM0	IVA	5/12 lymph nodes	1/30/2013
C16				lymph node	metastases	metastatic squamous cell carcinoma					
A17	M	50	Caucasian	tongue	NAT	NAT					
B17				tongue	cancer	squamous cell carcinoma	G1-2	T2N2bM0	IVA	2/21 lymph nodes	4/15/2013
C17				lymph node	metastases	metastatic squamous cell carcinoma					
A18	M	63	Caucasian	mouth floor mucosa	NAT	NAT					
B18				mouth floor mucosa	cancer	squamous cell carcinoma	G1-2	T4aN1M0	IVA	1/15 lymph nodes	2/19/2014
C18				lymph node	metastases	metastatic squamous cell carcinoma					
A19	M	57	Caucasian	larynx	NAT	NAT					
B19				larynx	cancer	squamous cell carcinoma	G2	T2N1M0	III	1/14 lymph nodes	5/29/2013
C19				lymph node	metastases	metastatic squamous cell carcinoma					
A20	M	58	caucasian	Tongue	NAT	NAT					
B20					Cancer	squamous cell carcinoma	G2	T1N0M0	I	no	7/17/2008
A21	M	62	caucasian	Tongue	NAT	NAT					
B21					Cancer	squamous cell carcinoma	G2	T3N0M0	III	no	7/27/2009
A22	F	64	caucasian	Tongue	NAT	NAT					
B22					Cancer	squamous cell carcinoma	G3	T4aN2bM0	IVA	2/8 lymph nodes	11/18/2009
A23	M	79	caucasian	Tongue	NAT	NAT					
B23					Cancer	squamous cell carcinoma	G3	T3N0M0	III	no	10/6/2009
B24	M	46	caucasian	Tongue	Cancer	squamous cell carcinoma	G2	T4N0M0	IVA	0/7lymph nodes	12/10/2007
A25	F	72	caucasian	oral cavity	NAT	NAT					
B25					Cancer	squamous cell carcinoma	G2	T2N0M0	II	no	5/6/2010

B26	F	88	caucasian	lip	Cancer	squamous cell carcinoma	G2	T3N0M0	III	no	1/18/2010
C27	M	51	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	G2	T3N1M0	III	1/1 lymph node	12/17/2009
C28	M	68	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	G2	recurrent	N/A	soft tissue	4/6/2009
C29	M	59	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	G2	T3N1M0	III	1/10 lymph nodes	3/11/2008
C30	M	48	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	G1	T2N1M0	III	1/8 lymph nodes	2/4/2008
C31	M	58	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	N/A	recurrent	N/A	5/6 lymph nodes	1/11/2007
C32	M	58	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	N/A	recurrent	N/A	3/19 lymph nodes	11/28/2006
C33	M	64	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	N/A	recurrent	N/A	1/9 lymph nodes	11/27/2006

Normal tissue: A
Primary HNSCC tissue: B
Metastatic tissue: C

Supplementary Tables: Table S4. Clinical information associated with HNSCC saliva specimens used for metabolomic validation

Sample ID	Sex	Age	Ethnicity/Race	Specimen type	Diagnosis	Histological diagnosis	Grade	TNM	Stage
D3426	M	49	Caucasian	saliva	normal				
D3492	F	47	Caucasian	saliva	normal				
D3493	F	49	Caucasian	saliva	normal				
D3529	F	55	Caucasian	saliva	normal				
D3530	F	60	Caucasian	saliva	normal				
D3531	F	63	Caucasian	saliva	normal				
D3532	M	49	Caucasian	saliva	normal				
D3533	M	65	Caucasian	saliva	normal				
65190	F	59	Caucasian	saliva	cancer	buccal	G2	T2N2M0	IV
65195	F	48	Caucasian	saliva	cancer	oral	N/A	T3N1M0	III
65196	M	56	Caucasian	saliva	cancer	oral	N/A	T2N0M0	II
65197	M	53	Caucasian	saliva	cancer	tongue	G3	T3N2M0	IV
65181	F	47	Caucasian	saliva	cancer	oral	G2	T4N1M0	IV
65183	F	54	Caucasian	saliva	cancer	buccal	G1	T3N0M0	III
65199	M	70	Caucasian	saliva	cancer	buccal	G2	T3N1M0	III
65200	M	59	Caucasian	saliva	cancer	oral	G1-2	T3N1M0	III
25068	M	56	Caucasian	saliva	cancer	oral	G1	T3N0M0	III
25069	F	47	Caucasian	saliva	cancer	oral	G2	T2N0M0	II

Supplementary Tables: Table S5. Clinical information associated with HNSCC plasma samples used for metabolomic validation

Sample ID	Sex	Age	Ethnicity	Specimen type	Diagnosis	Histological diagnosis	Grade	TNM	Stage
D2718	M	62	Caucasian	plasma	normal				
D3241	M	51	Caucasian	plasma	normal				
D3255	F	42	Caucasian	plasma	normal				
D3277	M	59	Caucasian	plasma	normal				
D3278	M	40	Caucasian	plasma	normal				
D3324	F	53	Caucasian	plasma	normal				
D3352	M	56	Caucasian	plasma	normal				
23001	M	61	Caucasian	plasma	cancer	oral	G1	T2N0M0	II
23003	F	44	Caucasian	plasma	cancer	oral	G1	T3N0M0	III
23006	M	49	Caucasian	plasma	cancer	oral	G2	T4N2bM0	IV
23008	M	63	Caucasian	plasma	cancer	oral	G1	T3N1M0	III
65110	M	40	Caucasian	plasma	cancer	al cancer, brain metastas	N/A	recurrent	N/A
65200	M	59	Caucasian	plasma	cancer	mouth floor mucosa	G1-2	T3N1M0	III
65205	F	55	Caucasian	plasma	cancer	mandible	G1	T3N1M0	III

Supplementary Tables: Table S6. Clinical information associated with HNSCC tissue specimens used for glutaminase immunohistochemical staining

Sample ID	Sex	Age	Ethnicity	Specimen type	Diagnosis	Biosample histological diagnosis	Grade	TNM	Stage	Metastases	Date of surgery
A1	M	57	caucasian		NAT	NAT					
B1				larynx	cancer	squamous cell carcinoma	G2	T2N2bM0	IVA		8/6/2008
C1				lymph node	metastases	metastatic squamous cell carcinoma				5/10 lymph nodes	
A2	M	64	caucasian		NAT	NAT					
B2				larynx	cancer	squamous cell carcinoma	G3	T2N2bM0	IVA	2/6 lymph nodes	9/3/2008
C2				lymph node	metastases	metastatic squamous cell carcinoma					
A3	M	53	caucasian		NAT	NAT					
B3				larynx	cancer	squamous cell carcinoma	G2	T2N2bM0	IVA	2/7 lymph nodes	2/26/2007
C3				lymph node	metastases	metastatic squamous cell carcinoma					
B20	M	58	caucasian	Tongue	Cancer	squamous cell carcinoma	G2	T1N0M0	I	no	7/17/2008
A21	M	62	caucasian		NAT	NAT					
B21				Tongue	Cancer	squamous cell carcinoma	G2	T3N0M0	III	no	
A22	F	64	caucasian		NAT	NAT					
B22				Tongue	Cancer	squamous cell carcinoma	G3	T4aN2bM0	IVA	2/8 lymph nodes	11/18/2009
A23	M	79	caucasian		NAT	NAT					
B23				Tongue	Cancer	squamous cell carcinoma	G3	T3N0M0	III	no	10/6/2009
A25	F	72	caucasian		NAT	NAT					
B25				Oral cavity	Cancer	squamous cell carcinoma	G2	T2N0M0	III	no	5/6/2010
B26	F	88	caucasian	Lip		squamous cell carcinoma	G2	T3N0M0	III	no	1/18/2010
A34	F	39	caucasian		NAT	NAT					
B34				Oral cavity	Cancer	squamous cell carcinoma	G2	T3N1M0	IVA	1/3 lymph nodes	11/5/2009
A35	M	57	caucasian		NAT	NAT					
B35				Oral cavity	Cancer	squamous cell carcinoma	G1	T4N0M0	IVA	no	2/17/2009
A36	F	83	caucasian		NAT	NAT					
B36				Lip	Cancer	squamous cell carcinoma	G3	T3N0M0	III	no	2/31/2008
A37	M	59	caucasian		NAT	NAT					
B37				Larynx	Cancer	squamous cell carcinoma	G2	T3N0M0	III	no	8/19/2008
A38	M	50	caucasian		NAT	NAT					
B38				Larynx	Cancer	squamous cell carcinoma	G3	T3N0M0	III	0/3 lymph nodes	9/1/2008
A39	M	70	caucasian		NAT	NAT					
B39				Larynx	Cancer	squamous cell carcinoma	G2	T3N0M0	III	no	9/23/2008
A40	M	59	caucasian		NAT	NAT					

B40				Larynx	Cancer	squamous cell carcinoma	G1	T3N0M0	III	0/2 lymph nodes	10/20/2008
A41	M	67	caucasian		NAT	NAT					
B41				Larynx	Cancer	squamous cell carcinoma	G2	T1N2bM0	IVA	3/10 lymph nodes	9/2/2009
A42	M	67	caucasian		NAT	NAT					
B42				Larynx	Cancer	squamous cell carcinoma	G2	T3N1M0	III	1/4 lymph nodes	9/9/2009
B43	M	63	caucasian	Larynx	cancer	squamous cell carcinoma	G2		IVA		
B44	M	60	caucasian	Larynx	Cancer	squamous cell carcinoma	G3	T3N0M0	III	no	3/15/2010
C27	M	51	caucasian	Lymph node	Metastsses	metastatic squamous cell carcinoma	G2	T3N1M0	III	1/1 lymph node	12/17/2009
C28	M	68	caucasian	Lymph node	Metastsses	metastatic squamous cell carcinoma	G2	recurrent	N/A	soft tissue	4/6/2009
C29	M	59	caucasian	Lymph node	Metastsses	metastatic squamous cell carcinoma	G2	T3N1M0	III	1/10 lymph nodes	3/11/2008
C30	M	48	caucasian	Lymph node	Metastsses	metastatic squamous cell carcinoma	G1	T2N1M0	III	1/8 lymph nodes	2/4/2008
C31	M	58	caucasian	Lymph node	Metastsses	metastatic squamous cell carcinoma	N/A	recurrent	N/A	5/6 lymph nodes	1/11/2007
C32	M	58	caucasian	Lymph node	Metastsses	metastatic squamous cell carcinoma	N/A	recurrent	N/A	3/19 lymph nodes	11/28/2006
C33	M	64	caucasian	Lymph node	Metastsses	metastatic squamous cell carcinoma	N/A	recurrent	N/A	1/9 lymph nodes	11/27/2006

Normal: A

Primary HNSCC tissue: B

Metastatis tissue: C

Supplementary Tables: Table S7. Clinical information associated with HNSCC tissue specimens used for glutaminase, ALDH and cMyc qPCR

Sample ID	Sex	Age	Ethnicity	Specimen type	Diagnosis	Biosample histological diagnosis	Grade	TNM	Stage	Metastases	Date of surgery
A2	M	64	caucasian		NAT	NAT					
B2				larynx	cancer	squamous cell carcinoma	G3	T2N2bM0	IVA	2/6 lymph nodes	9/3/2008
C2				lymph node	metastases	metastatic squamous cell carcinoma					
A3	M	53	caucasian		NAT	NAT					
B3				larynx	cancer	squamous cell carcinoma	G2	T2N2bM0	IVA	2/7 lymph nodes	2/26/2007
C3				lymph node	metastases	metastatic squamous cell carcinoma					
A4	M	56	Caucasian	larynx	normal	NAT					
B4				larynx	cancer	squamous cell carcinoma	G3	T2N2M0	IVA	5/11 lymph nodes	7/18/2012
C4				lymph nodes	metastases	metastatic squamous cell carcinoma					
A5	M	54	Caucasian	larynx	normal	NAT					
B5				larynx	cancer	squamous cell carcinoma	G1	T3N2M0	IVA	12/37 lymph nodes	10/5/2012
C5				lymph nodes	metastases	metastatic squamous cell carcinoma					
A6	M	59	Caucasian	tongue	normal	NAT					
B6				tongue	cancer	squamous cell carcinoma	G3	T4aN1M0	IVA	1/9 lymph nodes	5/11/2012
C6				lymph nodes	metastases	metastatic squamous cell carcinoma					
A7	M	63	Caucasian	laryngopharynx	normal	NAT					
B7				laryngopharynx	cancer	squamous cell carcinoma	G3	T3N2M0	IVA	9/9 lymph nodes	10/18/2012
C7				lymph nodes	metastases	metastatic squamous cell carcinoma					
A8	M	71	Caucasian		NAT	NAT					
B8				larynx	tumor	squamous cell carcinoma	G2	T4aN2bM0	IVA	2/8 lymph nodes	11/16/2011
C8				lymph node	metastasis	metastatic squamous cell carcinoma					
A9	M	60	Caucasian		NAT	NAT					
B9				hypopharynx	tumor	squamous cell carcinoma	G3	T3N2bM0	IVA	3/7 lymph nodes	7/18/2011
C9				lymph node	metastasis	metastatic squamous cell carcinoma					
A10	M	53	Caucasian		NAT	NAT					
B10				larynx	tumor	squamous cell carcinoma	G3	T4aN2cM0	IVA	2/19 lymph nodes	5/23/2011
C10				lymph node	metastasis	metastatic squamous cell carcinoma					
A11	M	61	Caucasian		NAT	NAT					
B11				larynx	tumor	squamous cell carcinoma	G2	T3N2cM0	IVA	5/19 lymph nodes	12/10/2010
C11				lymph node	metastasis	metastatic squamous cell carcinoma					
A12	M	60	Caucasian		NAT	NAT					
B12				larynx	cancer	squamous cell carcinoma	G3	T4aN2bM0	IVA	6/9 lymph nodes	3/15/2012
C12				lymph node	metastases	metastatic squamous cell carcinoma					
A13	M	57	Caucasian		NAT	NAT					
B13				larynx	cancer	squamous cell carcinoma	G2	T3N2aM0	IVA	1/14 lymph nodes	5/29/2013

C13				lymph node	metastases	metastatic squamous cell carcinoma					
A14	M	54	Caucasian		NAT	NAT					
B14				larynx	cancer	squamous cell carcinoma	G1	T4aN2cM0	IVA	12/34 lymph nodes	10/5/2012
C14				lymph node	metastases	metastatic squamous cell carcinoma					
A15	M	56	Caucasian		NAT	NAT					
B15				larynx	cancer	squamous cell carcinoma	G3	T4aN2bM0	IVA	4/10 lymph nodes	8/2/2010
C15				nasal cavity	metastases	metastatic squamous cell carcinoma		recurrent	N/A	nasal cavity	7/21/2011
A21	M	62	caucasian		NAT	NAT					
B21				Tongue	Cancer	squamous cell carcinoma	G2	T3N0M0	III	no	7/21/2009
A35	M	57	caucasian		NAT	NAT					
B35				Oral cavity	Cancer	squamous cell carcinoma	G1	T4N0M0	IVA	no	2/17/2009
A36	F	83	caucasian		NAT	NAT					
B36				Lip	Cancer	squamous cell carcinoma	G3	T3N0M0	III	no	2/31/2008
A37	M	59	caucasian		NAT	NAT					
B37				Larynx	Cancer	squamous cell carcinoma	G2	T3N0M0	III	no	8/19/2008
A38	M	50	caucasian		NAT	NAT					
B38				Larynx	Cancer	squamous cell carcinoma	G3	T3N0M0	III	0/3 lymph nodes	9/1/2008
A39	M	70	caucasian		NAT	NAT					
B39				Larynx	Cancer	squamous cell carcinoma	G2	T3N0M0	III	no	9/23/2008
A40	M	59	caucasian		NAT	NAT					
B40				Larynx	Cancer	squamous cell carcinoma	G1	T3N0M0	III	0/2 lymph nodes	10/20/2008
A41	M	67	caucasian		NAT	NAT					
B41				Larynx	Cancer	squamous cell carcinoma	G2	T1N2bM0	IVA	3/10 lymph nodes	9/2/2009
A42	M	67	caucasian		NAT	NAT					
B42				Larynx	Cancer	squamous cell carcinoma	G2	T3N1M0	III	1/4 lymph nodes	9/9/2009
A44	M	60	caucasian			NAT					
B44			caucasian	Larynx	Cancer	squamous cell carcinoma	G3	T3N0M0	III	no	3/15/2010
C27	M	51	caucasian	Lymph node	Metatstsses	metastatic squamous cell carcinoma	G2	T3N1M0	III	1/1 lymph node	12/17/2009
C28	M	68	caucasian	Lymph node	Metatstsses	metastatic squamous cell carcinoma	G2	recurrent	N/A	soft tissue	4/6/2009
C29	M	59	caucasian	Lymph node	Metatstsses	metastatic squamous cell carcinoma	G2	T3N1M0	III	1/10 lymph nodes	3/11/2008
C30	M	48	caucasian	Lymph node	Metatstsses	metastatic squamous cell carcinoma	G1	T2N1M0	III	1/8 lymph nodes	2/4/2008
C31	M	58	caucasian	Lymph node	Metatstsses	metastatic squamous cell carcinoma	N/A	recurrent	N/A	5/6 lymph nodes	1/11/2007
C32	M	58	caucasian	Lymph node	Metatstsses	metastatic squamous cell carcinoma	N/A	recurrent	N/A	3/19 lymph nodes	11/28/2006
C33	M	64	caucasian	Lymph node	Metatstsses	metastatic squamous cell carcinoma	N/A	recurrent	N/A	1/9 lymph nodes	11/27/2006

C45	M	62	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	N/A	recurrent	N/A	1/11 lymph nodes	2/27/2010
C46	M	61	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	G2	T3N2cM0	IVA	5/19 lymph nodes	12/10/2010
C47	F	61	caucasian	Lymph node	Metastases	metastatic squamous cell carcinoma	G1	T2N2bM0	IVA	2/15 lymph nodes	12/17/2009

Normal: A
Primary HNSCC tissue: B
Metastatic tissue: C

Supplementary Tables: Table S8. qPCR reagents for glutaminase, ALDH1A1, c-myc and GAPDH							
Name	Company	Catalog #	Assay ID	Gene Symbol	Assay Concentration	Scale	
TaqMan® Gene Expression Assay, SM	Applied Biosystems	4331182	Hs00248163_m1	GLS, hCG25795	FAM-MGB / 20X	S: 250 rxns	
TaqMan® Gene Expression Assay, SM	Applied Biosystems	4331182	Hs03929097_g1	GAPDH, hCG2005673	FAM-MGB / 20X	S: 250 rxns	
TaqMan® Gene Expression Assay, SM	Applied Biosystems	4331182	Hs00153408_m1	MYC, hCG15917	FAM-MGB / 20X	S: 250 rxns	
TaqMan® Gene Expression Assay, SM	Applied Biosystems	4331182	Hs00946916_m1	ALDH1A1		200 reactions	
High-Capacity cDNA Reverse Transcription Kit	Applied Biosystems	4368814				1 x 5 mL (200 reactions)	