

# Genetic determinants in head and neck squamous cell carcinoma and their influence on global personalized medicine – Michmerhuizen et al

## Supplementary Information

**Table S1. Age-standardized head and neck cancer incidence rates by sex and subsite for various global cohorts**

(21) Incidence rates per 100,000 for adult (age > 15 years) males and females in various global cohorts with cancers of the oral cavity, oropharynx, or other head and neck sites from 1998-2002. Other HNSCC sites include the pyriform sinus, hypopharynx, lip/oral cavity/pharynx not otherwise specified, and larynx.

(131) Incidence rates per 100,000 for adult males and females in Zimbabwe from 1996-2000. Other HNSCC site incidence is the sum of the nasopharyngeal and laryngeal cancer incidence.

(132) Incidence rates per 100,000 for males and females of all ages in Australia with cancer of the lip and oral cavity or oropharynx from 1982-2008.

(133) Incidence rates per 100,000 for males and females of all ages in Guilan, Iran from 2008-2009 with cancers of the lip and oral cavity or pharynx and tonsil from 2008-2009.

\* indicates incidence not available

Country	Oral Cavity		Oropharynx		Other Sites		Reference
	Male	Female	Male	Female	Male	Female	
<b>Belarus</b>	8.93	0.73	4.75	0.23	18.93	0.34	(21)
<b>UK</b>	5.18	2.75	2.13	0.65	7.74	1.69	(21)
<b>France</b>	15.25	3.12	9.43	1.48	22.69	1.7	(21)
<b>Italy</b>	6.08	2.41	2.8	0.57	14.36	1.08	(21)
<b>China (Hong Kong)</b>	4.72	2.38	1.25	0.26	16.19	0.61	(21)
<b>India (Mumbai)</b>	15.49	8.12	2.82	0.61	16.66	2.89	(21)
<b>Philippines</b>	5.3	3.97	0.93	0.62	9.81	0.55	(21)
<b>Iran (Guilan)</b>	1.91	1.25	1.49	0.67	*	*	(133)
<b>Jews</b>	2.64	1.59	0.57	0.18	7.09	1.16	(21)
<b>Canada</b>	5.7	2.92	2.36	0.7	7.39	1.44	(21)

<b>US (134)</b>	9.65	3.31	4.93	0.95	15.81	3.5	(21)
<b>US (White)</b>	7.16	3.41	2.9	0.73	8.31	2.07	(21)
<b>Costa Rica</b>	2.69	0.73	1.07	*	5.95	0.42	(21)
<b>Brazil</b>	12.73	2.66	4.56	*	16.12	1.73	(21)
<b>Zimbabwe</b>	6.4	1.2	*	*	1.6	1.5	(131)
<b>Australia</b>	7.84	3.06	3.97	1.01	*	*	(132)

**Table S2. Raw data for frequency of *PIK3CA* aberration in oral cancer used to generate Figure 6**

Bold text indicates amplification of chromosomal locus 3q26 (as opposed to *PIK3CA*)

\* indicates that both amplification of *PIK3CA* and chromosomal locus 3q26 were reported (*PIK3CA* amplification rate was used to generate **Figure 6**.)

For countries with more than one value for *PIK3CA* mutation or amplification, an average was used to generate the **Figure 6**.

<b>Country</b>	<b>Amplification</b>				<b>Mutation</b>			<b>Reference</b>
	<b>No. amp</b>	<b>Total</b>	<b>%</b>	<b>*</b>	<b>No. mut</b>	<b>Total</b>	<b>%</b>	
<b>Japan</b>	3	115	2.6%		3	115	2.6%	(103)
<b>US</b>	14	31	<b>45.2%</b>		2	31	6.5%	(103)
<b>Israel</b>					4	37	10.8%	(103)
<b>US</b>					6	74	8.1%	(103)
<b>US</b>					3	120	2.5%	(103)
<b>Taiwan</b>	40	82	48.8%					(103)
<b>US</b>					1	35	2.9%	(103)
<b>Greece</b>					0	86	0%	(103)
<b>Spain</b>	9	24	37.5%					(103)
<b>Vietnam</b>					0	18	0%	(103)
<b>India</b>					2	19	10.5%	(103)
<b>US</b>					5	24	20.8%	(103)
<b>UK</b>	56	68	<b>82.4%</b>					(103)
<b>Germany</b>	7	12	<b>58.3%</b>					(103)
<b>Germany</b>	3	33	9.1%	*	0	33	0%	(103)
<b>Japan</b>	6	50	12%		2	50	4%	(103)
<b>Thailand</b>	12	58	20.7%		6	58	10.3%	(103)
<b>US</b>					4	38	10.5%	(103)

<b>Taiwan</b>	21	25	<b>84%</b>					(103)
<b>Germany</b>	85	280	<b>30.4%</b>					(103)
<b>Spain</b>	43	117	<b>36.8%</b>					(103)
<b>UK</b>	34	45	<b>75.6%</b>					(103)
<b>US</b>	34	49	<b>69.4%</b>					(103)
<b>Germany</b>	4	7	<b>57.1%</b>					(103)
<b>US</b>	50	75	<b>66.7%</b>					(103)
<b>Germany</b>	26	44	<b>59.1%</b>					(103)
<b>France</b>	6	9	<b>66.7%</b>	*				(103)
<b>Japan</b>	29	32	<b>90.6%</b>					(103)
<b>Japan</b>	7	11	<b>63.6%</b>					(103)
<b>Germany</b>	26	30	<b>86.7%</b>					(103)
<b>US</b>	5	10	<b>50%</b>					(103)
<b>US</b>	10	13	<b>76.9%</b>					(103)
<b>India</b>					2	50	4.0%	(135)
<b>Taiwan</b>					9	50	18%	(136)
<b>Taiwan</b>					58	345	16.8%	(137)
<b>US</b>					45	279	16.1%	(138)
<b>India</b>					2	50	4%	(18)
<b>Italy</b>					2	61	3.3%	(139)
<b>Singapore</b>					3	66	4.5%	(116)
<b>Asia</b>					5	60	8.3%	(17)
<b>Taiwan</b>					11	79	13.9%	(115)
<b>Asia</b>					5	123	4.1%	(117)
<b>US</b>	44	279	15.8%					(138)
<b>Italy</b>	6	64	9.4%					(139)
<b>South Korea</b>	7	7	100%					(140)
<b>India</b>	0	50	0%					(18)
<b>Taiwan</b>	5	123	4.1%					(141)