

Study	n total	n Surgery only	HPV/P16+ rate	Primary emergence (%)		Sites of emergence	Regional recurrence (%)		Distant metastasis (%)	
				ND only	Entire study		ND only	Entire study	ND only	Entire study
Cummings 2021	540	63	82.4%	-	-	-	-	-	-	-
Wichmann 2021	115	19	43.5% P16+ 45.5% HR HPV+	-	7.0%	-	-	8.7%	-	9.6%
Dorobisz 2019	233	18	Not stated	-	-	-	-	-	-	-
Zhou 2018	75	6	76.3%	16.7%	5.3%	4 total (1 in surgery only group but site not stated): Oral cavity - 2 Oropharynx - 1 Supraglottis - 1	50.0%	-	0.0%	-
Hung 2018	69	5	Not stated	-	11.6%	-	40.0%	42.0%	-	27.5%
Mizuta 2018	80	27	Not stated	22.2%	11.0%	Surgery only (6): Oropharynx - 2 Hypopharynx - 3 Oral cavity - 1 Multi-modality treatment (3): Nasopharynx - 1 Oropharynx - 1 Hypopharynx - 1	-	20.0%	-	12.5%
Axelsson 2017	68	7	69.5%	-	1.5%	Oropharynx - 1 (initial treatment not specified)	-	8.8%	-	1.5%
Dou 2016	77	30	Not stated	33.3%	18.1%	14 total (10 in surgery group but site not stated): Nasopharynx - 3 Oropharynx - 3 Oral cavity - 3 Hypopharynx - 3 Sinonasal - 1 Oesophagus - 1	33.3%	20.8%	3.3%	7.8%
Lou 2015	133	46	Not stated	37.0%	21.8%	Surgery only (17): Nasopharynx - 6 Oropharynx - 3 Hypopharynx - 5 Larynx - 3 Multi-modality (12): Nasopharynx - 4 Oropharynx - 3 Hypopharynx - 1 Oesophagus - 2 Lung - 2	-	13.5%	-	3.8%
Wongsritrang 2012	139	17	Not stated	-	8.6%	12 total (initial treatment not specified): Nasopharynx - 2 Sinonasal - 2 Oropharynx - 3 Oral Cavity - 2 Larynx - 1 Oesophagus - 2	-	13.7%	-	7.9%
Rodel 2009	58	8	Not stated	-	7.0%	4 total (initial treatment not specified): Larynx - 1 Hypopharynx - 2 Lung - 1	-	22.4%	-	36.2%
Miller 2008	17	9	Not stated	11.1%	5.9%	Surgery only (1): Oropharynx - 1	22.2%	17.6%	0.0%	5.9%
Patel 2007	70	10	Not stated	20.0%	11.4%	8 total (2 in surgery group but site not specified): Oropharynx - 4 Oral Cavity - 2 Larynx - 2	0.0%	20.0%	-	7.1%
Iganej 2002	106	29	Not stated	27.6%	17.9%	19 total (initial treatment not specified): Nasopharynx - 2 Oropharynx - 10 Supraglottis - 3 Hypopharynx - 4	-	34.0%		9.4%

Table 3: Primary emergence and recurrence data.