ON-LINE APPENDIX

The full-text of these studies was reviewed, and 26 studies were excluded as follows: studies evaluating patients with enlarged cervical LNs (not all patients had HNSCC [$n = 9$]),[1-9] studies including patients with non-HNSCC malignancy (nasopharyngeal carcinoma or lymphoma [$n = 5$]),[10-14] a study population partially overlapping other studies ($n = 4$),[15-18] studies that did not allow a 2×2 contingency table to be obtained ($n = 4$),[19-22] and studies not in the field of interest ($n = 4$).[23-26]

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On-line Table 1: Study characteristics

Study (Year)	Institution	Patient Recruitment Period	No. of Patients	No. of LNs	Metastatic LNs (%)	Location of Primary Tumors (No.)	Mean Age (yr)	Age Range (yr)	Male/ Female	Study Design	Informed Consent	Approval by Ethics Committee
Barchetti et al[4] (2014)	Sapienza University of Rome, Italy	January 2009 to December 2012	80	651	36.7	NA	NA	34–75	49:31	Prospective	Obtained	Yes
de Bondt et al[5] (2009)	Maastricht University Medical Center, the Netherlands	March 2006 to December 2007	16	219	11.9	Oral cavity (9), oropharynx (2), nasopharynx (2), salivary gland (1), cheek (1), nasal cavity (1)	59	40–77	9:7	Prospective	NA	Yes
Goel et al[6] (2016)	Acharya Vinobha Bhave Rural Hospital Sawangi (Meghe), India	July 2013 to August 2015	61	61	55.7	Oral cavity (61)	49	NA	45:16	Prospective	Obtained	Yes
Lee et al[7] (2013)	National Tsing Hua University, Taiwan	July 2009 to June 2010	22	169	13.6	Oral cavity (17), hypopharynx (3), oropharynx (2)	49.8	28–66	21:1	Prospective	Obtained	Yes
Si et al[8] (2014)	Shandong Provincial Hospital affiliated with Shandong University, China	September 2010 to December 2012	25	51	41.2	Oral cavity (18), cheek (5), oropharynx (2)	63.3	52–81	16:9	Prospective	Obtained	Yes
Stecco et al[9] (2016)	University of Eastern Piedmont, "Maggiore della Carità" Hospital, Italy	March 2010 to January 2013	25	34	73.5	Nasopharynx (14), oropharynx (8), hypopharynx (3)	NA	25–77	NA	Retrospective	Obtained	No
Vandecaveye et al[10] (2009)	University Hospitals Leuven, Belgium	July 2004 to May 2006	33	301	24.6	Oral cavity (15), larynx (11), oropharynx (4), hypopharynx (1), nasal cavity (1), unknown (1)	NA	48–81	NA	Prospective	Obtained	Yes
Wendl et al[11] (2016)	University Hospital Regensburg, Germany	NA	45	149	16.8	NA	NA	NA	NA	Prospective	Obtained	Yes
Zhong et al[12] (2014)	Tianjin Union Medicine Center, China	May 2010 to April 2012	30	65	73.8	Larynx (9), oral cavity (7), nasopharynx (6), nasal cavity (4), oropharynx (4)	53.6	38–70	21:9	NA	Obtained	Yes

Note:—NA indicates not available.

On-line Table 2: MRI characteristics

Study (Year)	Magnetic Field Strength	Manufacturer	Scanner	Coil	DWI Sequence	b-Value (s/mm^2)	TR (ms)	TE (ms)	Slice Thickness (mm)	Interslice Gap (mm)	Matrix	FOV (mm)	No. of Signal Acquisitions	Scan Time	ADC Cutoff Value (10^{-3} mm^2/s)
Barchetti et al[4] (2014)	3	GE Healthcare[a]	Discovery MR750	Dedicated coil for head and neck studies	Gradient-echo single-shot echo-planar imaging	0, 1000	5666	70	3	0	272 × 512	400	6	4 min 54 sec	0.965
de Bondt et al[5] (2009)	1.5	Philips Healthcare[b]	Gyroscan, Powertrack 6000	Synergy Head-Neck coil	Gradient-echo single-shot echo-planar imaging	0, 1000	5666	70	3	0	272 × 512	400	6	4 min 54 sec	1.0
Goel et al[6] (2016)	1.5	GE Healthcare	Brivo MR 355	Head coil	NA	0, 500, 1000	NA	NA	4	1	256 × 256	240	NA	NA	1.038
Lee et al[7] (2013)	3	Siemens[c]	Verio	12-Channel head coil combined with a 4-channel neck coil	Spin-echo single-shot echo-planar imaging	0, 800	8000	77	3	0.9	122 × 144	230	3	NA	0.851
Si et al[8] (2014)	3	Philips Healthcare	Achieva	16-Channel head and neck coil	Single-shot echo-planar imaging	0, NA, 800	3000	86	5	1	NA	200 × 200 × 118	3	1 min 36 sec	0.887
Stecco et al[9] (2016)	1.5	Philips Healthcare	Achieva	Head and neck coil (Synergy Multi-channel Sense)	NA	0, 400, 800	5411	71	4	0	124 × 124	250 × 250 × 160	6	NA	1.03
Vandecaveye et al[10] (2009)	1.5	Siemens	Sonata Vision	Standard head coil combined with a 2-channel dedicated surface neck coil	Echo-planar imaging	0, 50, 100, 500, 750, 1000	7100	84	4	0.4	104 × 128	200 × 250	3	5 min 19 sec	0.94
Wendl et al[11] (2016)	3	Siemens	Magnetom Skyra	24-Channel head/neck array coil	Spin-echo echo-planar imaging	0, 500, 1000	8200	76	3	0.3	144 × 144	230	4	4.16 min	0.994
Zhong et al[12] (2014)	1.5	Philips Healthcare	Achieva	Head and neck coil	NA	0, 600	17,131	60	NA	NA	132 × 98	NA	6	NA	0.96

Note:—NA indicates not available.

[a] Milwaukee, Wisconsin.

[b] Best, the Netherlands.

[c] Erlangen, Germany.