

Supplementary Online Content

Lee JJ, Peterson AM, Embry TW, et al. Survival outcomes of de novo vs inverted papilloma-associated sinonasal squamous cell carcinoma: a meta-analysis. *JAMA Otolaryngol Head Neck Surg*. Published online January 28, 2021. doi:10.1001/jamaoto.2020.5261

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable. Methodological Index for Nonrandomized Studies (MINORS) Criteria for Each Included Study

Study, Year	Clearly stated aim	Inclusion of consecutive patients	Prospective collection of data	Endpoints appropriate to the study aim	Unbiased assessment of study endpoints	Follow-up period appropriate to the study aim	Loss to follow up <5 %	Prospective calculation of study size	Additional criteria score for comparative studies	Total score
Direct Comparative Studies										
Lavertu P et al., 1989	2	2	0	2	2	1	1	0	6	16
de Almeida JR et al., 2015	2	2	0	2	2	2	0	1	6	17
Lobo BC et al., 2017	2	2	1	2	1	2	0	0	6	16
Yan CH et al., 2017	2	2	0	2	2	2	2	0	7	19
Yu MS et al., 2017	2	2	0	2	2	2	0	0	7	17
de novo Sinonasal SCC Only										
Haraguchi H, 1995	2	1	0	2	1	1	0	0	0	7
Dulguerov P et al., 2001	2	2	0	1	2	2	2	0	0	11
Ganly I et al., 2005	2	1	0	2	2	1	1	0	0	9
Lee CH et al., 2007	2	2	0	1	2	2	2	0	0	11
McKay SP et al., 2007	2	2	0	2	2	2	2	0	0	12
Nicolai P et al., 2008	2	2	0	1	2	1	2	0	0	10
Mine S et al., 2011	2	1	0	1	2	2	1	0	0	9
Russo AL et al., 2016	2	2	0	2	2	2	2	0	0	12
Chowdhury NA	2	2	0	2	2	0	1	0	0	9

et al. 2017										
IP-associated Sinonasal SCC only										
Hug EB et al., 1993	2	2	0	1	2	1	0	0	0	8
Lesperance MM et al., 1995	2	2	0	2	2	2	2	0	0	12
Buiet GM et al., 2012	2	2	0	2	2	1	0	0	0	9
Choi JW et al., 2012	2	2	0	2	1	2	2	0	0	11
Kim KK et al., 2012	2	2	0	2	2	2	0	0	0	10
Hong SL et al., 2013	2	2	0	1	2	2	1	0	0	10
Yu HX et al., 2014	2	2	0	2	2	1	2	0	0	11
Liang QZ et al., 2015	2	2	0	2	2	2	0	0	0	10
Karligkiotis A et al., 2016	2	2	0	2	2	2	2	0	0	12
Yasumatsu RN et al., 2017	2	2	0	2	0	2	2	0	0	10
Li YW et al., 2019	2	2	0	2	2	2	1	0	0	11
Li W et al., 2020	2	2	0	2	2	2	2	0	0	12

0 = not reported; 1 = reported but inadequate; 2 = reported and adequate.

eText. Complete Search Strategy

Ovid Medline

607 results on 06/18/19

22 results on 01/23/20 with limit to yr="2019 -Current"

(Exp nose/ OR Exp nose neoplasms/ OR Exp paranasal sinus neoplasms/ OR exp nasopharyngeal neoplasms/ OR nasopharyngeal.mp. OR nasopharynx*.mp. or rhinopharynx*.mp. OR sinus.mp. oR sinuses.mp. oR Sinonasal.mp. OR nasal.mp. OR nose.mp. OR ethmoid.mp. OR sphenoid.mp. OR paranasal.mp. OR intranasal.mp. OR septum.mp. OR septal.mp.

AND

(Exp squamous cell carcinoma/ OR SCC.mp. OR carcinoma*.mp. OR squamous.mp.)

AND

(Exp survival/ OR exp "survival rate"/ OR exp mortality/ or follow-up.mp. or follow up.mp. oR Die.mp. oR died.mp. OR alive.mp. OR lived.mp. OR live.mp. OR retrospective*.mp. OR surviv*.mp. or mortality.mp. or death.mp. OR (recurrence adj2 (incidence OR rate)).mp. OR recurrent.mp.)

AND

(Exp inverted papilloma/ OR Papilloma.mp. OR papillomas.mp. OR papillomatosis.mp. OR papillomatoses.mp.)

OR

((((Paranasal OR nasal* OR sinus OR sinuses OR nose OR sinonasal) adj5 (carcinoma* OR squamous OR neoplasm* OR cancer*).mp.)

AND (papilloma*.mp. OR papillary.mp. OR papillomatosis.mp. OR papillomatoses.mp.)) limit to yr="1946 - 1980")

Date range – 1946 -1980

Embase

241 results on 06/18/19

18 results on 01/23/20 with limit AND [18-6-2019]/sd NOT [24-1-2020]/sd

(‘nose’/exp OR ‘nose cancer’/exp OR ‘paranasal sinus cancer’/exp OR sinus:ti,ab,kw,de oR sinuses:ti,ab,kw,de oR Sinonasal:ti,ab,kw,de OR nasal:ti,ab,kw,de OR nose:ti,ab,kw,de OR ethmoid:ti,ab,kw,de OR sphenoid:ti,ab,kw,de OR paranasal:ti,ab,kw,de OR intranasal:ti,ab,kw,de OR septum:ti,ab,kw,de OR septal:ti,ab,kw,de) AND

(‘squamous cell carcinoma’/de OR ‘oropharynx squamous cell carcinoma’/exp OR ‘head and neck squamous cell carcinoma’/de OR ‘squamous cell carcinoma’:ti,ab,kw,de OR ‘squamous cell carcinomas’:ti,ab,kw,de)

AND

(‘survival’/exp OR ‘mortality’/exp or (follow* near/1 up) oR Die:ti,ab,kw,de oR died:ti,ab,kw,de OR alive:ti,ab,kw,de OR lived:ti,ab,kw,de OR live:ti,ab,kw,de OR retrospective*:ti,ab,kw,de OR surviv*:ti,ab,kw,de or mortality:ti,ab,kw,de or death:ti,ab,kw,de OR (recurrence near/2 (incidence OR rate)):ti,ab,kw,de OR recurrent:ti,ab,kw,de)

AND

(‘inverted papilloma’/exp OR ((Papilloma OR papillomas OR papillomatosis OR papillomatoses) near/2 invert*):ti,ab,kw,de)

Scopus

245 results on 06/18/19

15 results on 01/23/20 with limit AND (LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019))

((TITLE-ABS-KEY (sinus)) OR (TITLE-ABS-KEY (sinuses)) OR (TITLE-ABS-KEY (sinonasal)) OR (TITLE-ABS-KEY (nasal)) OR (TITLE-ABS-KEY (nose)) OR (TITLE-ABS-KEY (ethmoid)) OR (TITLE-ABS-KEY (sphenoid)) OR (TITLE-ABS-KEY (paranasal)) OR (TITLE-ABS-KEY (intranasal)) OR (TITLE-ABS-KEY (septum)) OR (TITLE-ABS-KEY (septal))) AND ((TITLE-ABS-KEY ("squamous cell carcinoma")) OR (TITLE-ABS-KEY ("squamous cell carcinomas"))) AND ((TITLE-ABS-KEY (follow* W/1 up)) OR (TITLE-ABS-KEY (die)) OR (TITLE-ABS-KEY (died)) OR (TITLE-ABS-KEY (alive)) OR (TITLE-ABS-KEY (lived)) OR (TITLE-ABS-KEY (live)) OR (TITLE-ABS-KEY (retrospective*)) OR (TITLE-ABS-KEY (surviv*)) OR (TITLE-ABS-KEY (mortality)) OR (TITLE-ABS-KEY (death)) OR (TITLE-ABS-KEY (recurrence W/2 (incidence OR rate))) OR (TITLE-ABS-KEY (recurrent))) AND ((TITLE-ABS-KEY (invert* W/3 (papilloma OR papillomas OR papillomatosis OR papillomatoses)))))

Cochrane Library

1 result in Cochrane Central Register of Controlled Trials on 06/18/19

0 results in Cochrane Database of Systematic Reviews on 06/18/19

0 results in Cochrane Central Register of Controlled Trials on 01/23/20

0 results in Cochrane Database of Systematic Reviews on 01/23/20 with limit Date added to CENTRAL trials database "The last 9 months"

([mh nose] OR [mh "nose neoplasms"] OR [mh "paranasal sinus neoplasms"] OR sinus:ti,ab,kw OR sinuses:ti,ab,kw OR Sinonasal:ti,ab,kw OR nasal:ti,ab,kw OR nose:ti,ab,kw OR ethmoid:ti,ab,kw OR sphenoid:ti,ab,kw OR paranasal:ti,ab,kw OR intranasal:ti,ab,kw OR septum:ti,ab,kw OR septal:ti,ab,kw)

AND

([mh "squamous cell carcinoma"] OR "squamous cell carcinoma":ti,ab,kw OR "squamous cell carcinomas":ti,ab,kw)

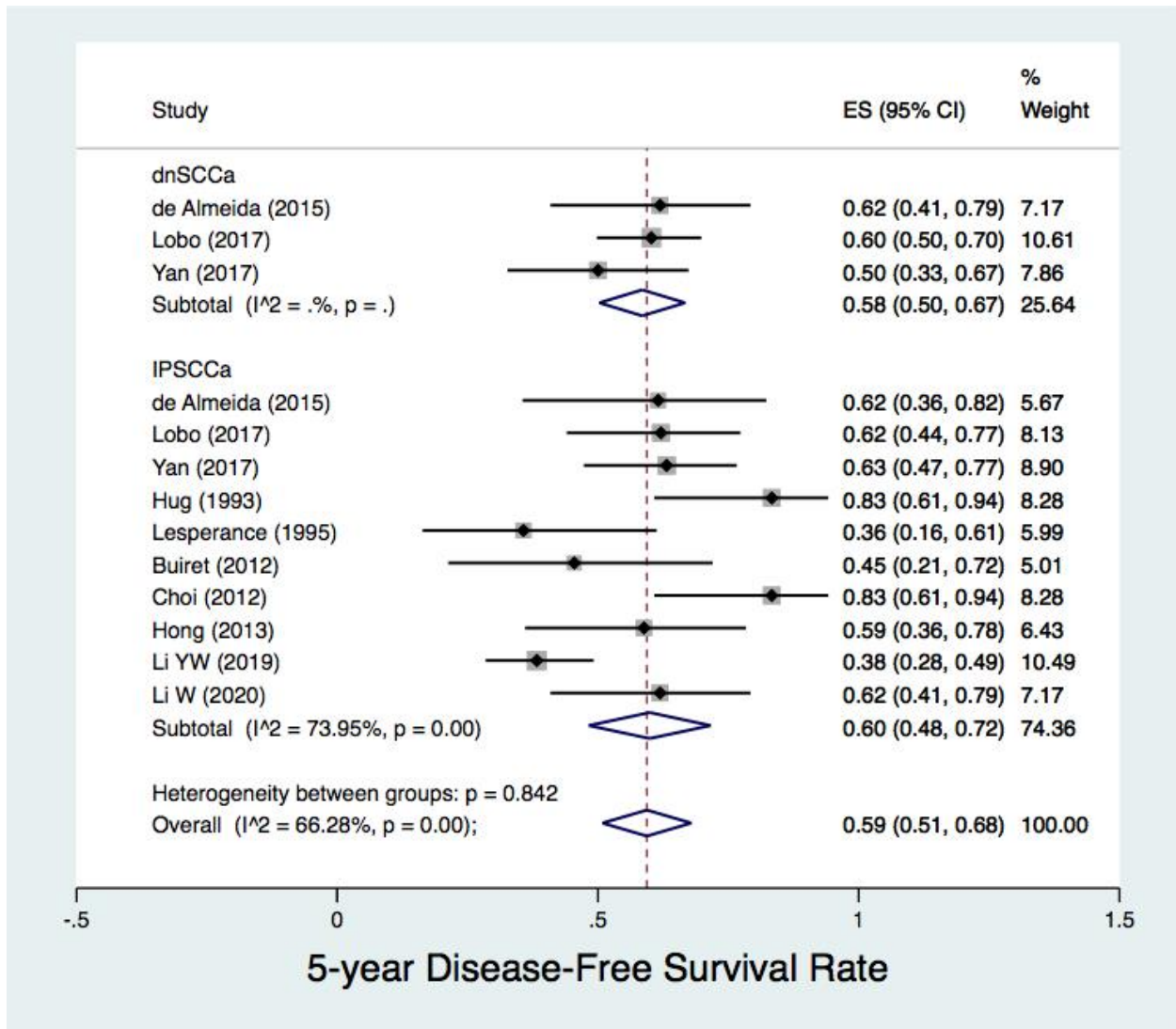
AND

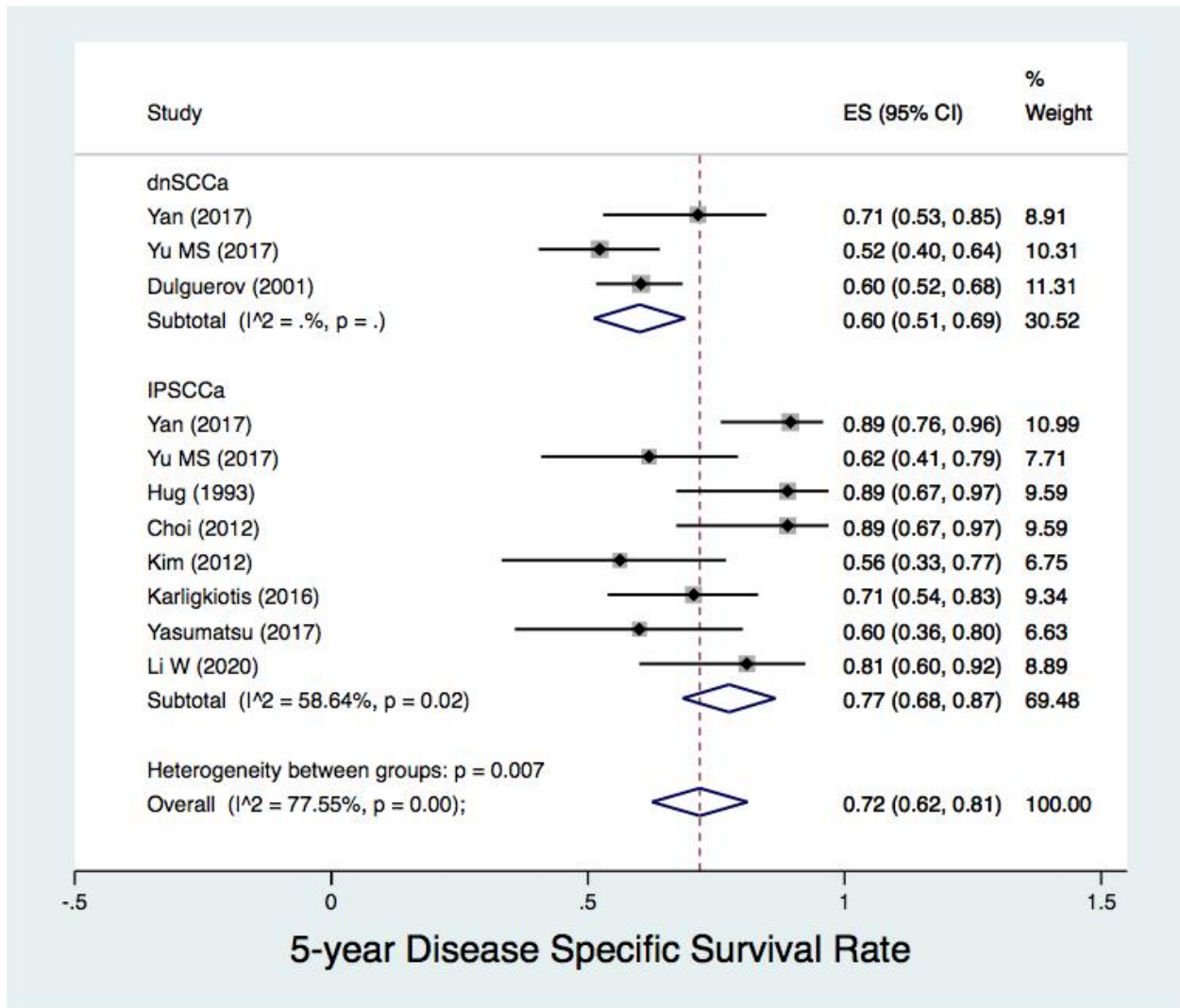
([mh survival] OR [mh mortality] OR [mh "survival rate"] OR (follow* near/1 up):ti,ab,kw OR Die:ti,ab,kw OR died:ti,ab,kw OR alive:ti,ab,kw OR lived:ti,ab,kw OR live:ti,ab,kw OR retrospective*:ti,ab,kw OR surviv*:ti,ab,kw OR mortality:ti,ab,kw OR death:ti,ab,kw OR (recurrence near/2 (incidence OR rate)):ti,ab,kw OR recurrent:ti,ab,kw)

AND

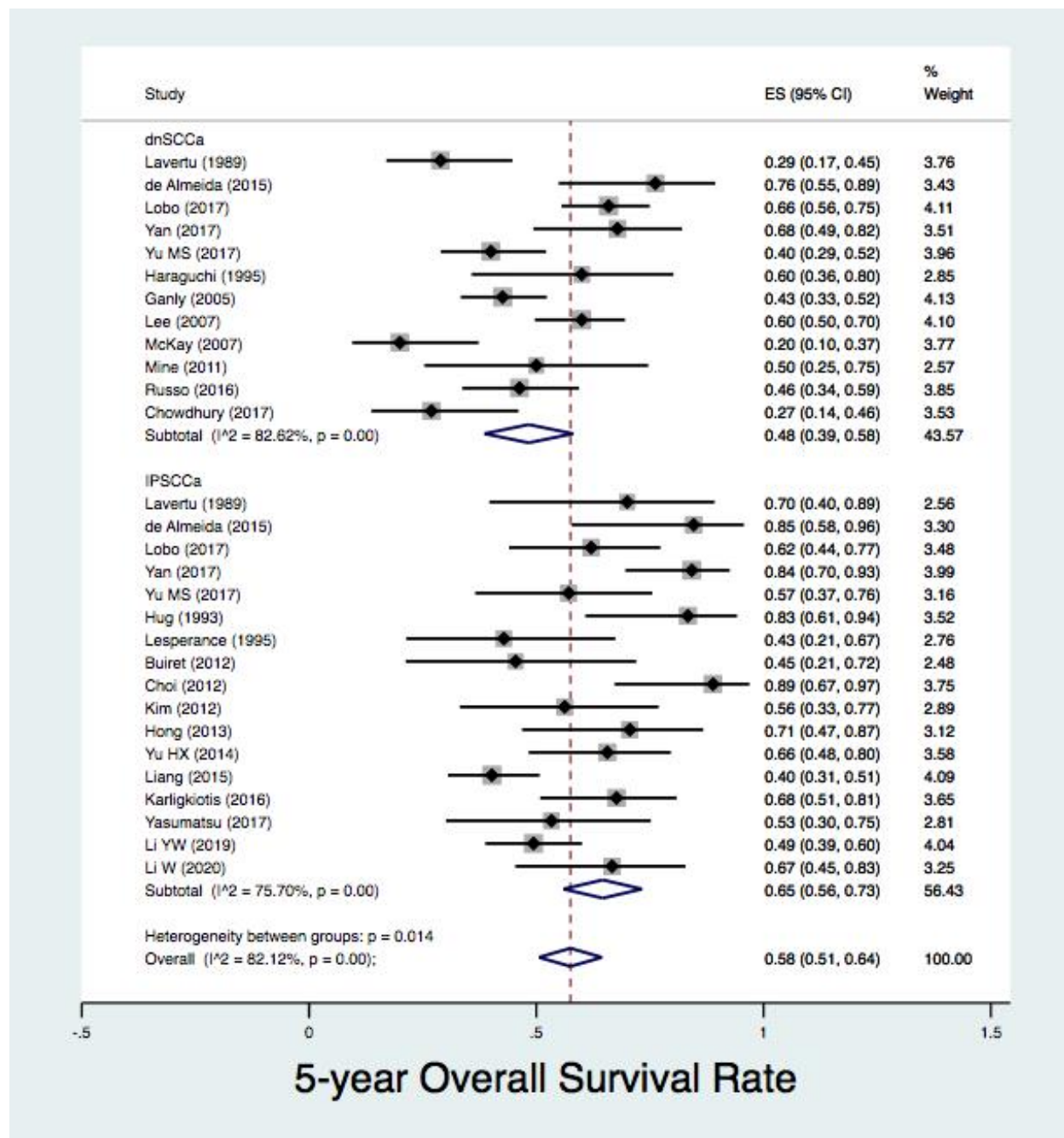
([mh "inverted papilloma"] OR (Papilloma OR papillomas OR papillomatosis OR papillomatoses) near/2 invert*):ti,ab,kw)

eFigure 1. Forest Plot of the Meta-Analysis of 5-Year Disease-Free Survival Rates Between dnSCC and IPSCC

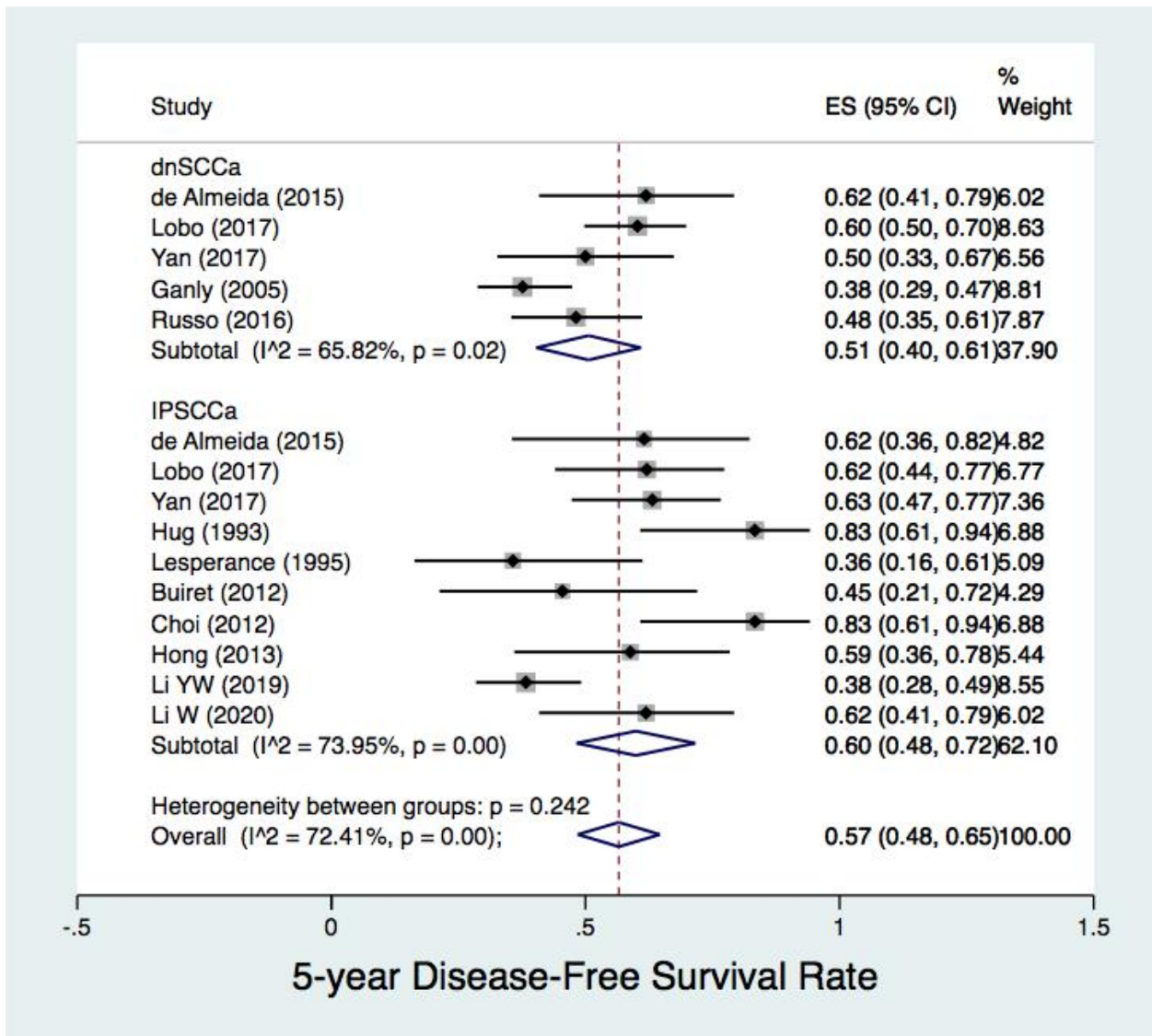




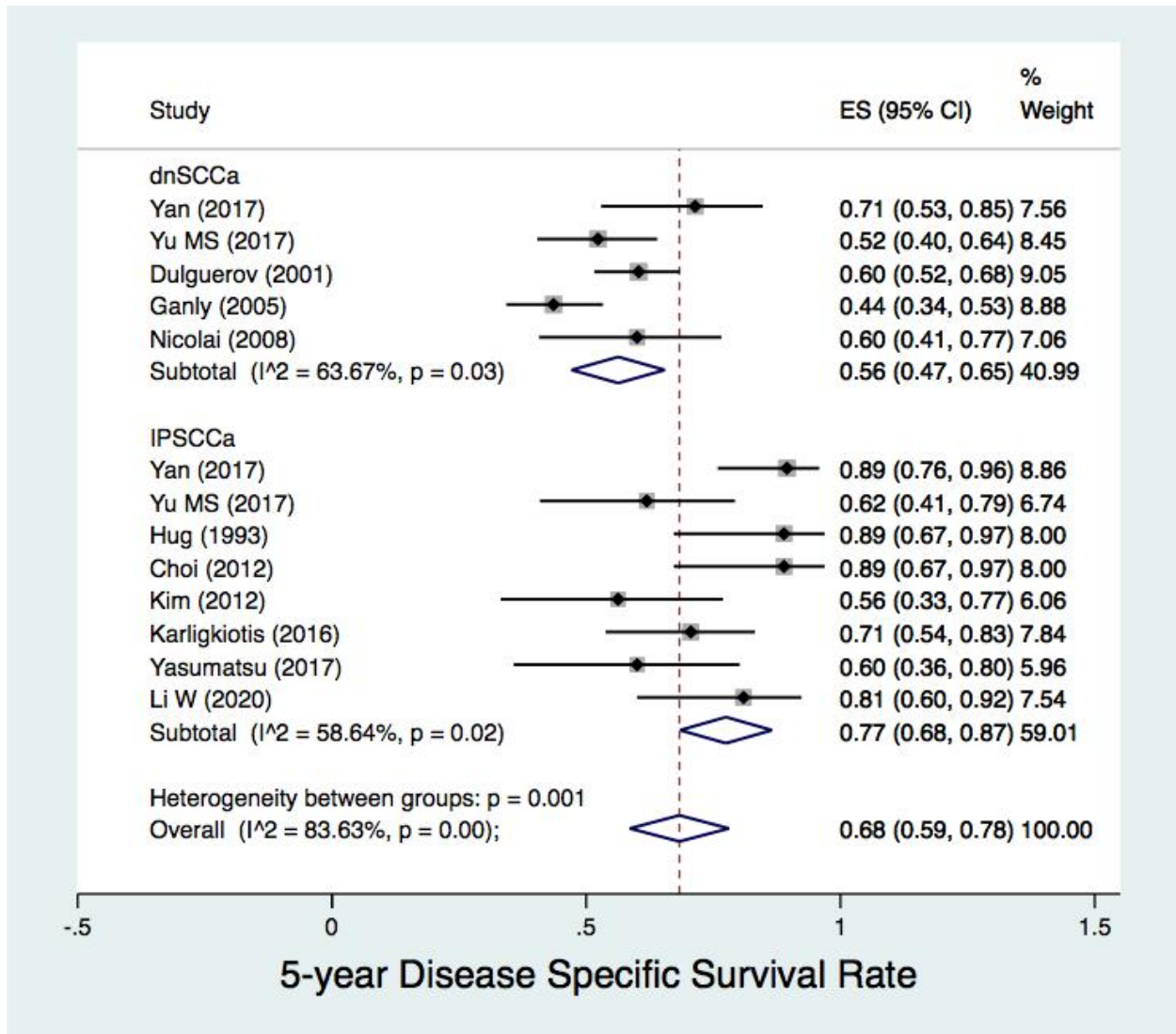
eFigure 2. Forest Plot of the Meta-Analysis of 5-Year Disease Specific Survival Rates Between dnSCCa and IPSCCa



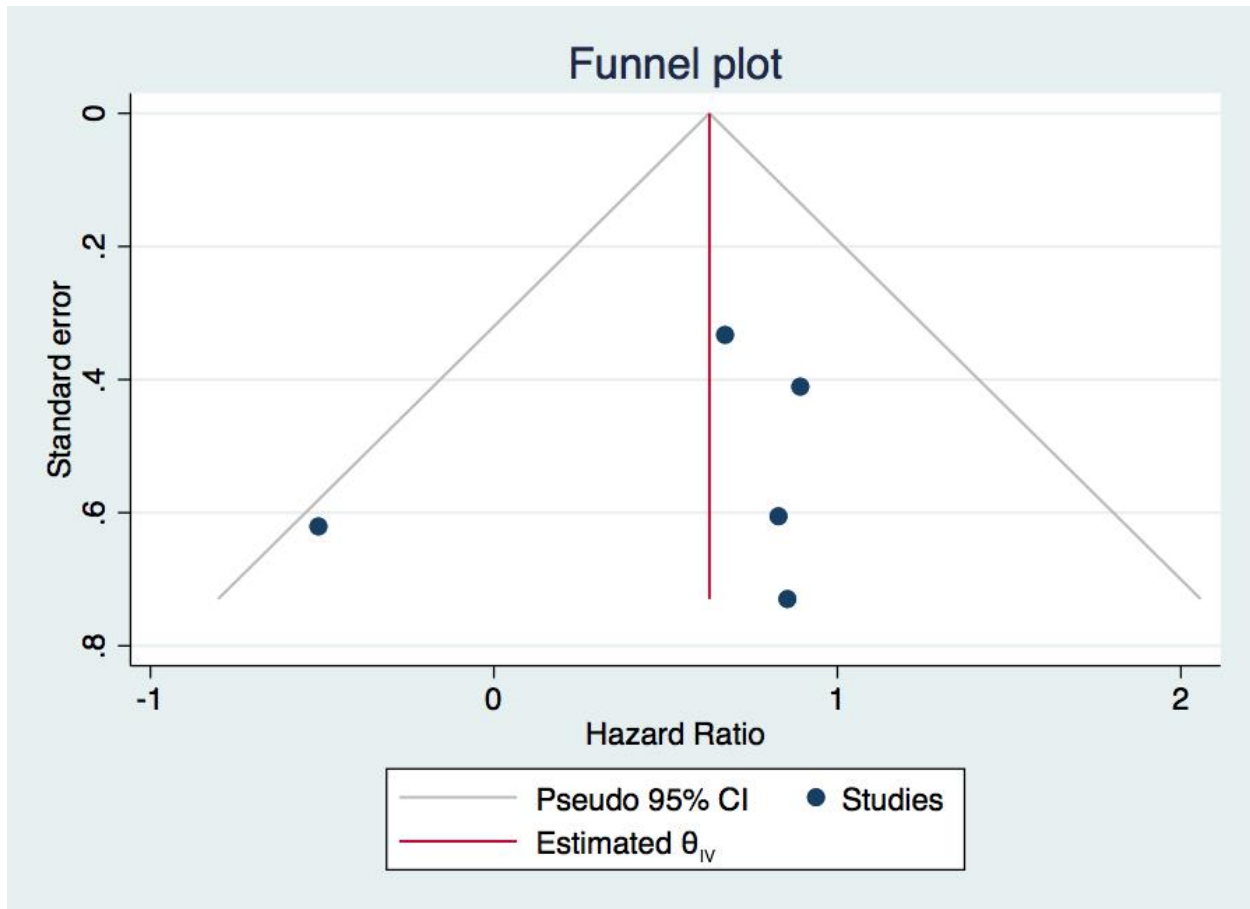
eFigure 3. Forest Plot of the Meta-Analysis of 5-Year Overall Survival Rates Between dnSCC and IPSCC When Including Studies That Did Not Explicitly Mention IP Status Into the De Novo Group



eFigure 4. Forest Plot of the Meta-Analysis of 5-Year Disease-Free Survival Rates Between dnSCC and IPSCC When Including Studies That Did Not Explicitly Mention IP Status Into the De Novo Group



eFigure 5. Forest Plot of the Meta-Analysis of 5-Year Disease-Specific Survival Rates Between dnSCCa and IPSCCa When Including Studies That Did Not Explicitly Mention IP Status Into the De Novo Group



eFigure 6. Funnel Plot of the Included Studies in the Meta-Analysis With Logarithmic Function of the Hazard Ratio on the X-Axis and Standard Error on the Y-Axis