

Literaturrecherchen für die Version 3 der S3-Leitlinie Diagnostik und Therapie der Plattenepithelkarzinome und Adenokarzinome des Ösophagus

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1. Recherchen zum Thema Diagnostik und Pathologie

1.1 Primärdiagnostik

PICO 03 Welchen Stellenwert haben endoskopische Spezialverfahren in der Primärdiagnostik des Ösophaguskarzinoms

Population: Pat. mit Verdacht auf Dysplasia/intraepitheliale Neoplasie (IEN), mit Frühkarzinom, mit Plattenepithel- oder Adenokarzinom des Ösophagus bzw. AEG 1-3; a) Pat. mit Barrett-Ösophagus b) Pat. mit Routine-Endoskopie/Zufallsbefund c) Patienten mit Endoskopie bei Dysphagie

Interventions: Endoskopische Spezialuntersuchungen: 1) HDTV, 2) computerisierte virtuelle Chromo-Endoskopie=CVC, 3) Narrow-band Imaging=NBI, 4) Zoomendoskopie = magnification endoscopy, 5) Confocal laser endomicroscopy (CM), 6) Autofluorescence Imaging (AI)

Comparison: Diagnostikstandard: Standard-Videoendoskopie

Referenzstandard: Histologie (durch EMR, ESD oder OP, Biopsie)

Outcomes: Diagnostische Güte: Spezifität, Sensitivität, positiver prädiktiver Wert, negativer prädiktiver Wert, diagnostic Accuracy, ROC

Recherche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	HDTV[tiab] OR high definition endoscopy[tiab]	145
#10	chromoendoscopy[tiab] OR chromo-endoscopy[tiab] OR cvc[tiab]	5.116
#11	Narrow Band Imaging[MeSH] OR ((narrow-band[tiab] OR narrow band[tiab] OR narrowband[tiab]) AND imaging*[tiab]) OR NBI[tiab]	2.972
#12	magnification endoscopy[tiab]	200
#13	Microscopy, Confocal [MeSH] OR ((confocal[tiab] OR laser[tiab]) AND (endomicroscop*[tiab] OR microscop*[tiab]))	107.533
#14	Optical Imaging[MeSH:noexp] OR fluorescence imaging*[tiab] OR autofluorescence imaging*[tiab]	18.058
#15	Image-enhanced endoscop*[tiab] OR image enhanced endoscop*[tiab]	159
#16	Microsatellite Instability[Mesh] OR "Microsatellite Instability"[tiab]	7.889
#17	#9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16	138.995

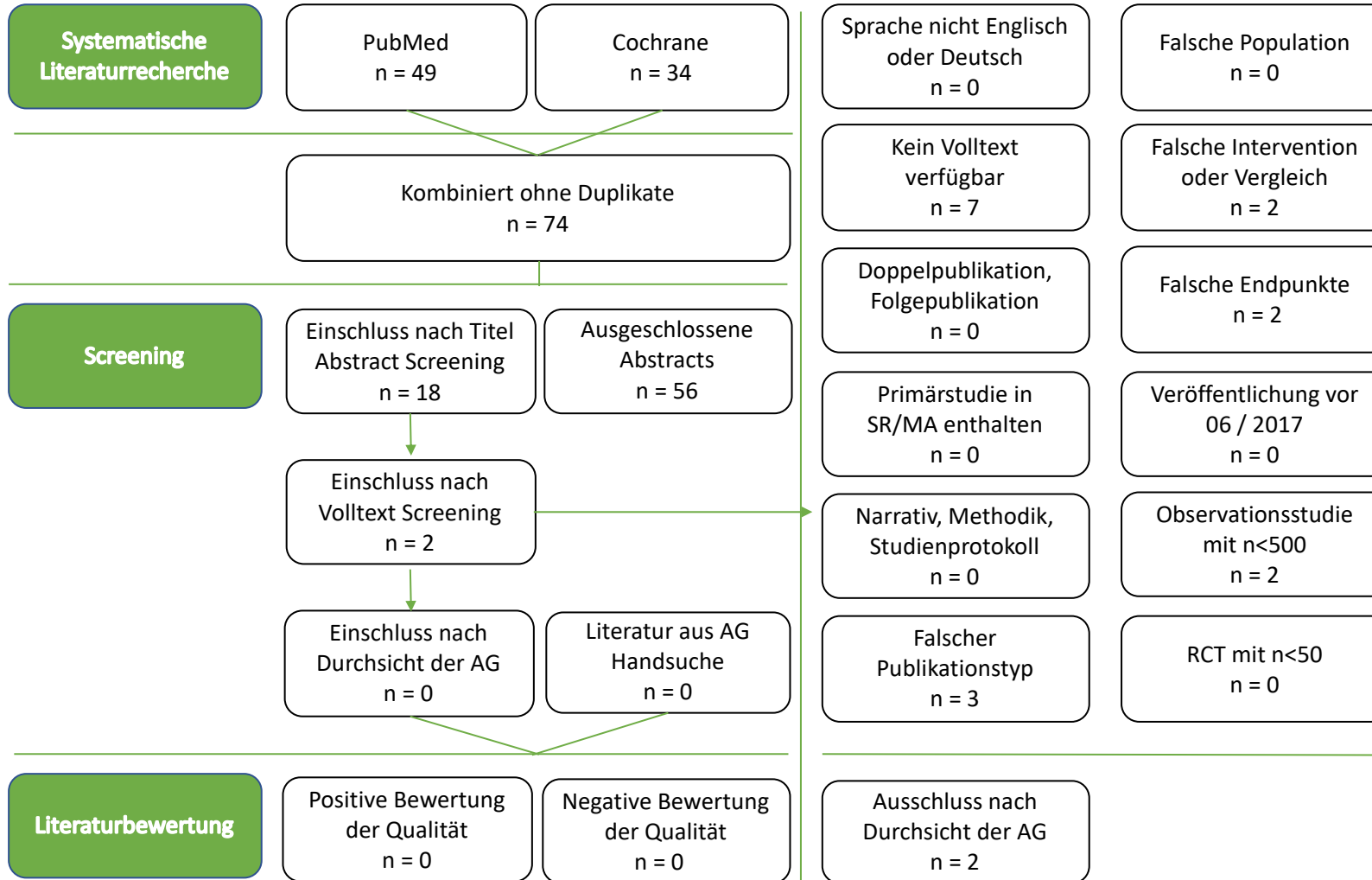
#18	Diagnostic Techniques and Procedures[MeSH] OR Diagnos*[tiab] OR Screen*[tiab] OR Detect*[tiab] OR Test*[tiab] OR assay[tiab] OR indicat*[tiab] OR quantif*[tiab] OR search[tiab] OR analy*[tiab] OR method*[tiab] or assess*[tiab] OR check*[tiab]	17.162.950
#19	#17 AND #18	127.688
#20	#8 AND #19	1.149
#21	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183.612
#22	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#23	cohort studies[mesh:noexp] OR longitudinal studies[mesh:noexp] OR follow-up studies[mesh:noexp] OR prospective studies[mesh:noexp] OR cohort[tiab] OR longitudinal[tiab] OR prospective[tiab]	1.869.537
#24	#21 OR #22 OR #23	2.998.629
#25	animals[mh] NOT humans[mh]	4.612.039
#26	#24 NOT #25	2.927.432
#27	#20 AND #26	289
#28	#27 Limits: Publication date from 2017/06 to 2019/09, German, English	49

Recherche in der Cochrane Library (27.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	HDTV or high definition endoscopy; ti,ab,kw	38

#11	chromoendoscopy or cvc; ti,ab,kw	299
#12	[mh "Narrow Band Imaging"] or ((narrow-band or narrow band or narrowband) and imaging*) or NBI; ti,ab,kw	458
#13	magnif* AND endoscop*; ti,ab,kw	2
#14	[mh "Microscopy, Confocal"] or ((confocal or laser) and (endomicroscop* or microscop*)); ti,ab,kw	371
#15	[mh ^"Optical Imaging"] or fluorescence imaging* or autofluorescence imaging*; ti,ab,kw	510
#16	Image-enhanced endoscop* or image enhanced endoscop*; ti,ab,kw	51
#17	microsatellite or instability; ti,ab,kw	414
#18	#10 or #11 or #12 or #13 or #14 or #15 or #16 or #17	1983
#19	[mh "Diagnostic Techniques and Procedures"] or Diagnos* or Screen* or Detect* or Test* or assay or indicat* or quantif* or search or analy* or method* or assess* or check*; ti,ab,kw	1132144
#20	#18 and #19	1895
#21	#9 and #20 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	34

PICO 03 Primärdiagnostik



1.2 Erweiterte Diagnostik: Endoskopischer Ultraschall

<p>PICO 04 Welchen Stellenwert hat der endoskopische Ultraschall (EUS) in der Ösophagus Diagnostik?</p> <p><u>Population:</u> Pat. mit Dysplasie/intraepithelialer Neoplasie, mit vor-diagnostiziertem Plattenepithel- oder Adenokarzinom des Ösophagus bzw. AEG 1-3</p> <p><u>Interventions:</u> Endosonographie (radial, longitudinal, miniprobe); endo-scopic ultrasound; EUS with fine-needle aspiration histology (EUS-FNA)</p> <p><u>Comparison:</u> CT-Thorax/-Abdomen, PET/PET-CT zur Primärdiagnostik Referenzstandard: Histologie (EMR, ESD, Operationspräparat)</p> <p><u>Outcomes:</u> Diagnostische Güte: bzgl. Dysplasie, T1 (Mukosa-/ Submukosafrühkarzinom) -T2-T4, N0-N3, M0/M1 Spezifität, Sensitivität, positiver prädiktiver Wert, negativer prädiktiver Wert, Accuracy</p>
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Recherche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	Endosonography[MeSH]	12.143
#10	Endosonograph*[tiab] OR Echo-Endoscop*[tiab] OR Echoendoscop*[tiab] OR Ultrasonic Endoscop*[tiab] OR EUS[tiab]	10.819
#11	endoscopic*[tiab] AND (US[tiab] OR ultrasonograph*[tiab] OR ultrasound[tiab] OR tri-modal imaging[tiab])	18.324
#12	#9 OR #10 OR #11	27.971
#13	Diagnostic Techniques and Procedures[MeSH] OR Diagnos*[tiab] OR Screen*[tiab] OR Detect*[tiab] OR Test*[tiab] OR assay[tiab] OR indicat*[tiab] OR quantif*[tiab] OR search[tiab] OR analy*[tiab] OR method*[tiab] or assess*[tiab] OR check*[tiab]	17.162.950
#14	#12 AND #13	26.774
#15	#8 AND #14	2.522
#16	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183.612

#17	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#18	cohort studies[mesh:noexp] OR longitudinal studies[mesh:noexp] OR follow-up studies[mesh:noexp] OR prospective studies[mesh:noexp] OR cohort[tiab] OR longitudinal[tiab] OR prospective[tiab]	1.869.537
#19	#16 OR #17 OR #18	2.998.629
#20	animals[mh] NOT humans[mh]	4.612.039
#21	#19 NOT #20	2.927.432
#22	#15 AND #21	673
#23	#22 Limits: Publication date from 2017/06 to 2019/09, German, English	63

Recherche in der Cochrane Library (27.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	[mh Endosonography] or Endosonograph* or Echo-Endoscop* or Echoendoscop* or Ultrasonic Endoscop* or EUS or (endoscopic* and (US or ultrasonograph* or ultrasound or tri-modal imaging)) ; ti,ab,kw	19573
#11	[mh "Diagnostic Techniques and Procedures"] or Diagnos* or Screen* or Detect* or Test* or assay or indicat* or quantif* or search or analy* or method* or assess* or check*; ti,ab,kw	1132144

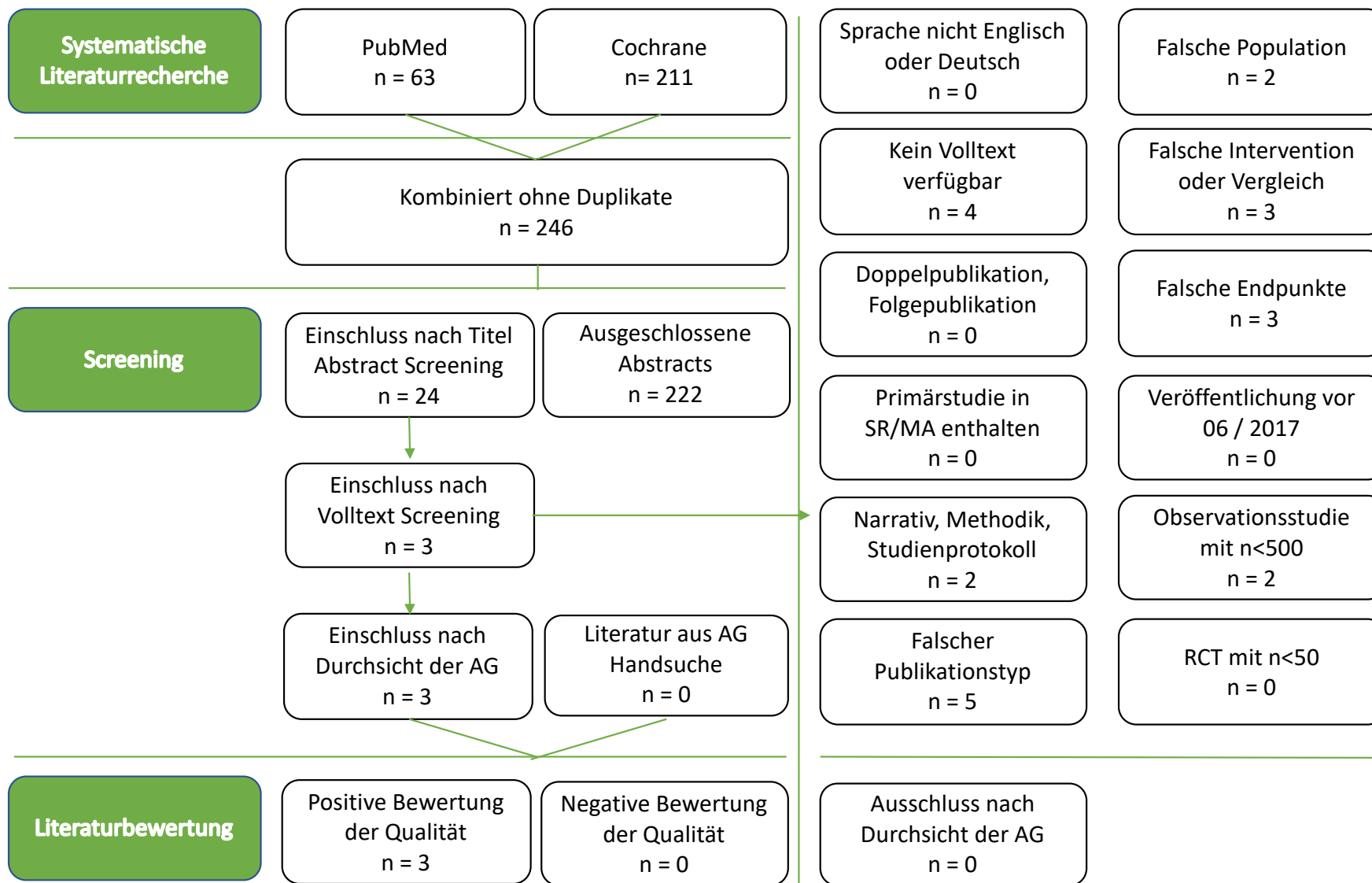


#12	#10 and #11	16745
#13	#9 and #12 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	211

Eingeschlossene Literatur:

(1-3)

PICO 04 Erweiterte Diagnostik – Endoskopischer Ultraschall



1.3 Erweiterte Diagnostik: Kontrastmittel

PICO 05 Welchen Stellenwert hat die Kontrastmittel Spiral CT in der Ösophagus Diagnostik?
<u>Population:</u> Pat. mit (hochgradiger) Dysplasie/IEN, mit vor-diagnostiziertem Plattenepithel- oder Adenokarzinom des Ösophagus bzw. AEG 1-3
<u>Interventions:</u> CT-Hals und CT-Thorax und CT-Abdomen
<u>Comparison:</u> 1) Kein CT-Hals, aber CT Thorax / Ab-domen 2) andere bild-gebende Verfahren: ext. US Hals, EUS, EUS-FNA; Röntgen Thorax in 2 Ebenen, Abdomensonographie, PET, PET-CT, MRT, Knochen-Szintigraphie, diagnostische Laparoskopie; Referenzstandard: Histologie (OP)
<u>Outcomes:</u> Diagnostische Güte: bzgl. Dys-plasie, T1 (Muko-sa-/ Submukosa-frühkarzinom) -T2-T4, N0-N3, M0/M1 Spezifität, Sensitivität, positiver prädiktiver Wert, negativer prädiktiver Wert, Accuracy

Recherche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	(contrast-enhanced[tiab] OR spiral[tiab] OR helical[tiab] OR multidetector[tiab] OR multisection[tiab] OR multislice[tiab]) AND (X-Ray Computed Tomography[MeSH] OR compute*[tiab] tomograph*[tiab] OR CT[tiab])	39.230
#10	DCE-CT[tiab] OR DCE CT[tiab] OR DECT[tiab] OR 3D-CT[tiab] OR 3D CT[tiab]	3.710
#11	#9 OR #10	42.285
#12	Diagnostic Techniques and Procedures[MeSH] OR Diagnos*[tiab] OR Screen*[tiab] OR Detect*[tiab] OR Test*[tiab] OR assay[tiab] OR indicat*[tiab] OR quantif*[tiab] OR search[tiab] OR analy*[tiab] OR method*[tiab] or assess*[tiab] OR check*[tiab]	17.162.950
#13	#11 AND #12	41.218
#14	#8 AND #13	355
#15	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183.612

#16	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#17	cohort studies[mesh:noexp] OR longitudinal studies[mesh:noexp] OR follow-up studies[mesh:noexp] OR prospective studies[mesh:noexp] OR cohort[tiab] OR longitudinal[tiab] OR prospective[tiab]	1.869.537
#18	#15 OR #16 OR #17	2.998.629
#19	animals[mh] NOT humans[mh]	4.612.039
#20	#18 NOT #19	2.927.432
#21	#14 AND #20	80
#22	#21, Limits: Publication date from 2017/06/01 to 2019/09/01, German, English	12

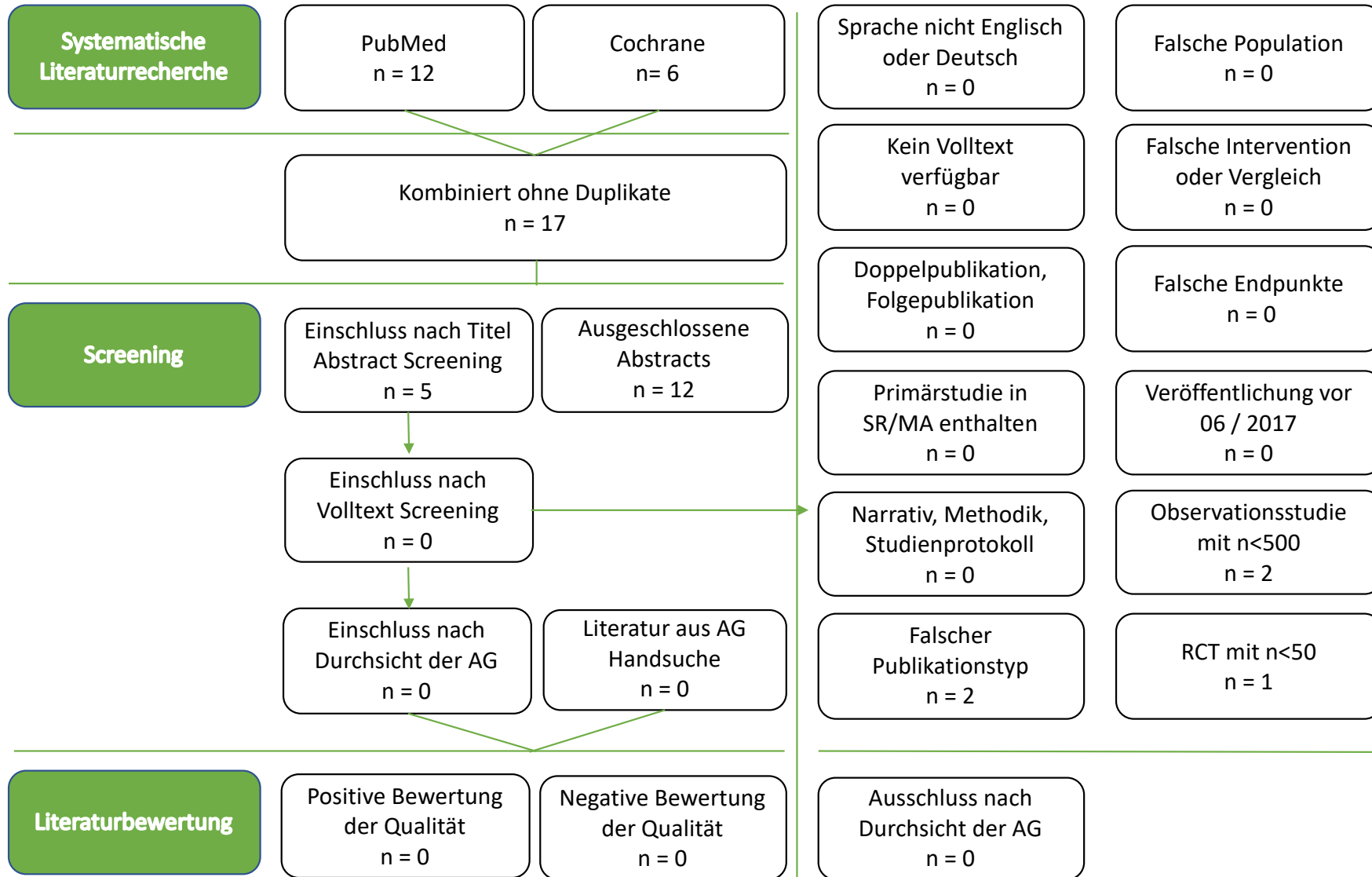
Recherche in der Cochrane Library (27.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	DCE-CT or DECT or 3D-CT OR 3D CT; ti,ab,kw	192
#11	computed tomography or CT; ti,ab,kw	16198
#12	contrast-enhanced or spiral or helical or multidetector or multisection or multislice; ti,ab,kw	4542
#13	#10 or (#11 and #12)	2193



#14	[mh "Diagnostic Techniques and Procedures"] or Diagnos* or Screen* or Detect* or Test* or assay or indicat* or quantif* or search or analy* or method* or assess* or check*; ti,ab,kw	1132144
#15	#13 and #14	2141
#16	#9 and #15 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019, in Trials	6

PICO 05 Erweiterte Diagnostik – Kontrastmittel



1.4 Erweiterte Diagnostik: MRT

PICO 06 Welchen Stellenwert hat die MRT in der Ösophagus Diagnostik?
<u>Population:</u> Pat. mit mit (hochgradiger) Dysplasie, IEN, vor-diagnostiziertem Plattenepithel- oder Adenokarzinom des Ösophagus bzw. AEG 1-3
<u>Interventions:</u> MRT
<u>Comparison:</u> Röntgen Thorax, Abdomen-sonographie, PET, Szintigraphie, CT, Referenzstandard: Histologie (OP)
<u>Outcomes:</u> Diagnostische Güte: bzgl. Dysplasie, T1 (Mukosa-/ Submukosa-frühkarzinom) -T2-T4, N0-N3, M0/M1 Spezifität, Sensitivität, positiver prädiktiver Wert, negativer prädiktiver Wert, Accuracy

Recherche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	Magnetic Resonance Imaging[MeSH]	428.295
#10	magnetic resonance imag*[tiab] OR MRI[tiab] OR MR imag*[tiab] OR NMR imag*[tiab] OR Zeugmatograph*[tiab] OR MR Tomograph*[tiab] OR NMR Tomograph*[tiab] OR Chemical Shift Imag*[tiab]	392.357
#11	#9 OR #10	567.178
#12	Diagnostic Techniques and Procedures[MeSH] OR Diagnos*[tiab] OR Screen*[tiab] OR Detect*[tiab] OR Test*[tiab] OR assay[tiab] OR indicat*[tiab] OR quantif*[tiab] OR search[tiab] OR analy*[tiab] OR method*[tiab] or assess*[tiab] OR check*[tiab]	17162950
#13	#11 AND #12	547.992
#14	#8 AND #13	970
#15	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183.612

#16	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#17	cohort studies[mesh:noexp] OR longitudinal studies[mesh:noexp] OR follow-up studies[mesh:noexp] OR prospective studies[mesh:noexp] OR cohort[tiab] OR longitudinal[tiab] OR prospective[tiab]	1.869.537
#18	#15 OR #16 OR #17	2.998.629
#19	animals[mh] NOT humans[mh]	4.612.039
#20	#18 NOT #19	2.927.432
#21	#14 AND #20	137
#22	#21 Limits: Publication date from 2017/06 to 2019/09, German, English	27

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ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	[mh "Magnetic Resonance Imaging"] or magnetic resonance imag* or MRI or MR imag* or NMR imag* or Zeugmatograph* or MR Tomograph* or NMR Tomograph* or Chemical Shift Imag*; ti,ab,kw	33783
#11	[mh "Diagnostic Techniques and Procedures"] or Diagnos* or Screen* or Detect* or Test* or assay or indicat* or quantif* or search or analy* or method* or assess* or check*; ti,ab,kw	1132144
#12	#10 and #11	31362

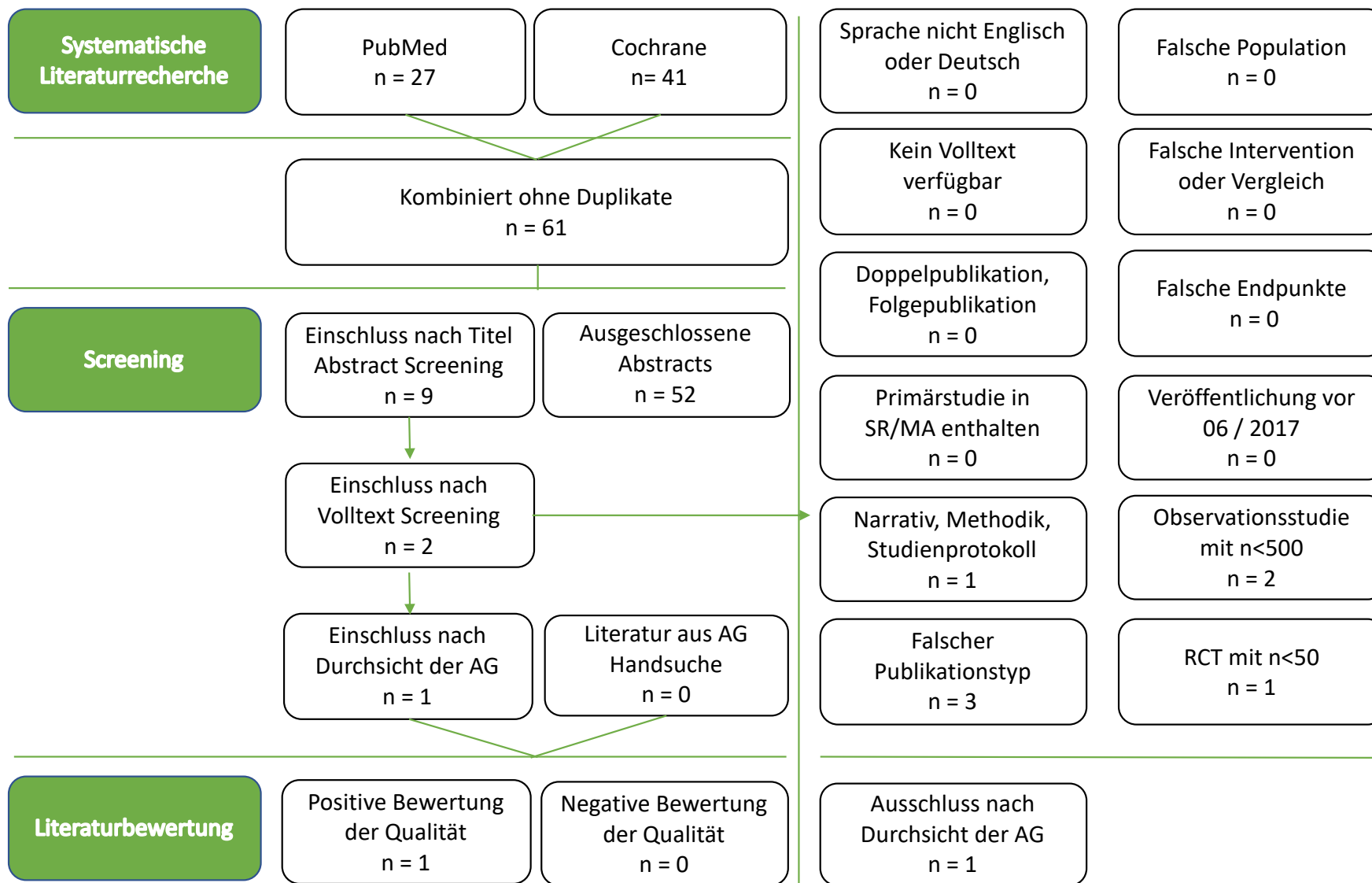


#13	#9 and #12 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	41
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Eingeschlossene Literatur

(1)

PICO 06 Erweiterte Diagnostik – MRT



1.5 Erweiterte Diagnostik: PET-CT

PICO 07 Welchen Stellenwert hat die PET bzw. PET-CT in der Ösophagus Diagnostik?
Population: Pat. mit diagnostiziertem Plattenepithel- oder Adenokarzinom des Ösophagus bzw. AEG 1-3
Interventions: PET, PET-CT
Comparison: Vergleichsdiagnostik mit CT /MRT / EUS / EUS-FNP / Szintigrafie
Referenzstandard: Histologie (OP)
Outcomes: Diagnostische Güte: bzgl. Dysplasie, T1 (Mukosa-/ Submukosafrühkarzinom) -T2-T4, N0-N3, M0/M1 Spezifität, Sensitivität, positiver prädiktiver Wert, negativer prädiktiver Wert, Accuracy

Recherche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	Positron-Emission Tomography[MeSH]	56.005
#10	pet[tiab] OR petscan[tiab] OR PET-CT[tiab] OR PET scan[tiab] OR FDG-PET[tiab] OR PET/CT[tiab] OR ((Positron Emission Tomograph*[tiab] OR PET[tiab]) AND (Compute*[tiab] AND Tomograph*[tiab]))	97.653
#11	#9 OR #10	111.773
#12	Diagnostic Techniques and Procedures[MeSH] OR Diagnos*[tiab] OR Screen*[tiab] OR Detect*[tiab] OR Test*[tiab] OR assay[tiab] OR indicat*[tiab] OR quantif*[tiab] OR search[tiab] OR analy*[tiab] OR method*[tiab] or assess*[tiab] OR check*[tiab]	17162950
#13	#11 AND #12	103.789
#14	#8 AND #13	1.671
#15	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183.612

#16	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#17	cohort studies[mesh:noexp] OR longitudinal studies[mesh:noexp] OR follow-up studies[mesh:noexp] OR prospective studies[mesh:noexp] OR cohort[tiab] OR longitudinal[tiab] OR prospective[tiab]	1.869.537
#18	#15 OR #16 OR #17	2.998.629
#19	animals[mh] NOT humans[mh]	4.612.039
#20	#18 NOT #19	2.927.432
#21	#14 AND #20	505
#22	#21 Limits: Publication date from 2017/06 to 2019/09, German, English	94

Recherche in der Cochrane Library (27.08.19)

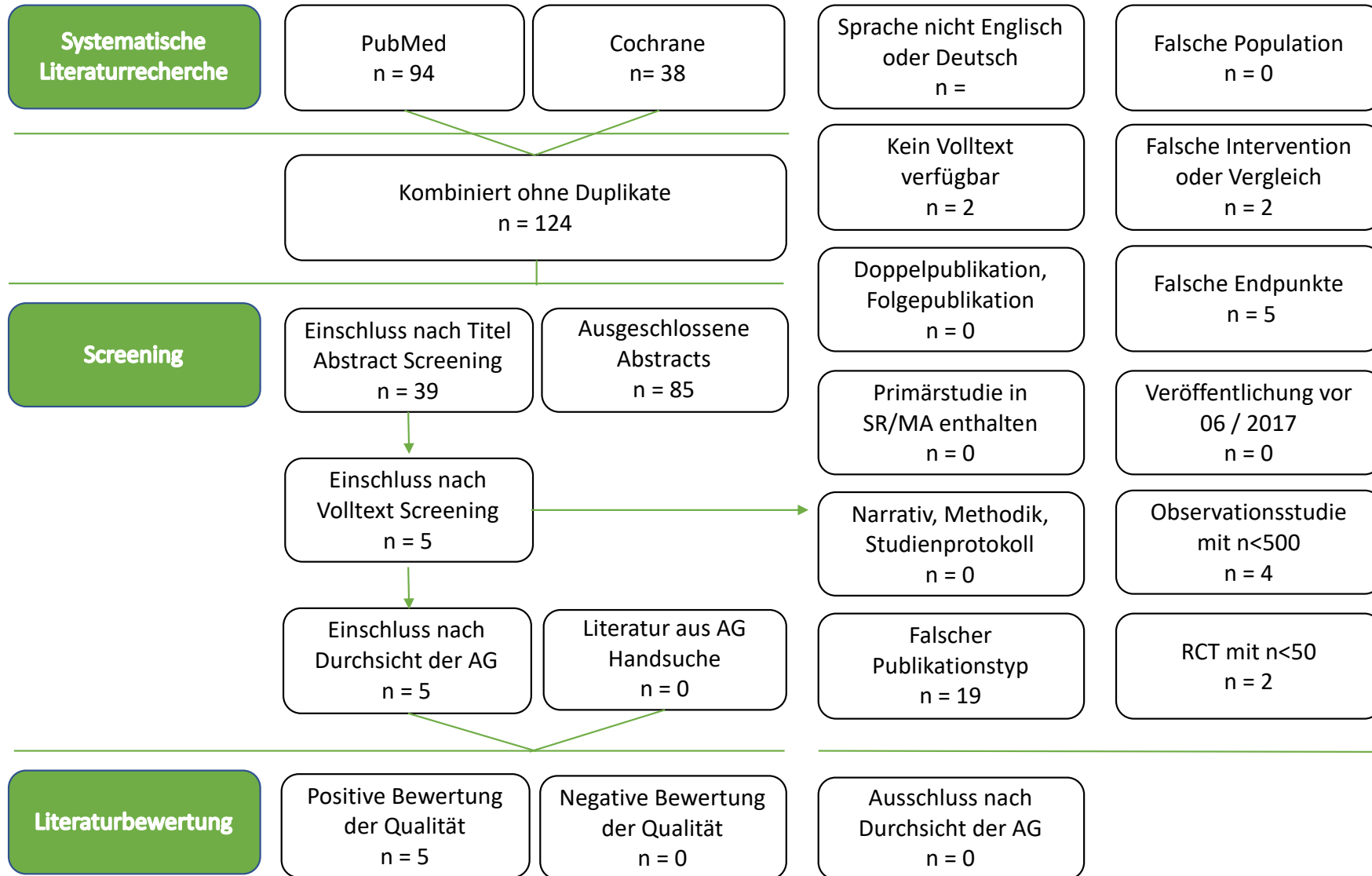
ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	[mh "Positron-Emission Tomography"]	996
#11	pet or petscan or PET-CT or PET scan or FDG-PET or PET CT or ((Positron Emission Tomograph* or PET) and (Compute* and Tomograph*)) ; ti,ab,kw	6862
#12	#10 or #11	7122
#13	[mh "Diagnostic Techniques and Procedures"] or Diagnos* or Screen* or Detect* or Test* or assay or indicat* or quantif* or search or analy* or method* or assess* or check*; ti,ab,kw	1132144
#14	#12 and #13	6508



#15	#9 and #14 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	38
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Eingeschlossene Literatur
(1, 2, 4-6)

PICO 07 Erweiterte Diagnostik – PET-CT



(1, 2, 4-6)

1.6 Pathologie

PICO 08 Pathologie: Korrelation des Tumorregressionsgrad mit Diagnostikverfahren des Ösophaguskarzinoms

Population: Pat. mit diagnostiziertem Plattenepithel- oder Adenokarzinom des Ösophagus bzw. AEG 1-3 und stattgehabter neoadjuvanter bzw. definitiver Radio/Chemotherapie, alleiniger Chemotherapie

Interventions: Tumorregressions-grad (Einteilung nach Mandard Klassifikation für Plattenepithel) und Einteilung nach Becker für Adeno-karzinom und, soweit angegeben, auch der Prozentwert des noch erhaltenen Tumor-gewebes (z.B. in 10er Schritten unabhängig von einer Klassifikation)

Comparison: -

Outcomes: Diagnostische Güte: bzgl. Dysplasie, T1 (Muko-sa-/ Submukosa-frühkarzinom) -T2-T4, N0-N3, M0/M1 Spezifität, Sensitivität, positiver prädiktiver Wert, negativer prädiktiver Wert, Accuracy

Recherche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	Histopathology[MeSH] OR histopathology[tiab] OR ((pathologic*[tiab] OR histopathologic*[tiab]) AND (staging[tiab] OR stage[tiab] OR assessment[tiab])) OR ((tumor[tiab] OR histomorphologic*[tiab] OR grad*[tiab]) AND (regress*[tiab] OR regressive changes[tiab])) OR TRG[tiab] OR ((Mandard[tiab] OR Becker[tiab]) AND classification[tiab])	266.235
#10	#8 AND #9	4.794
#11	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183.612

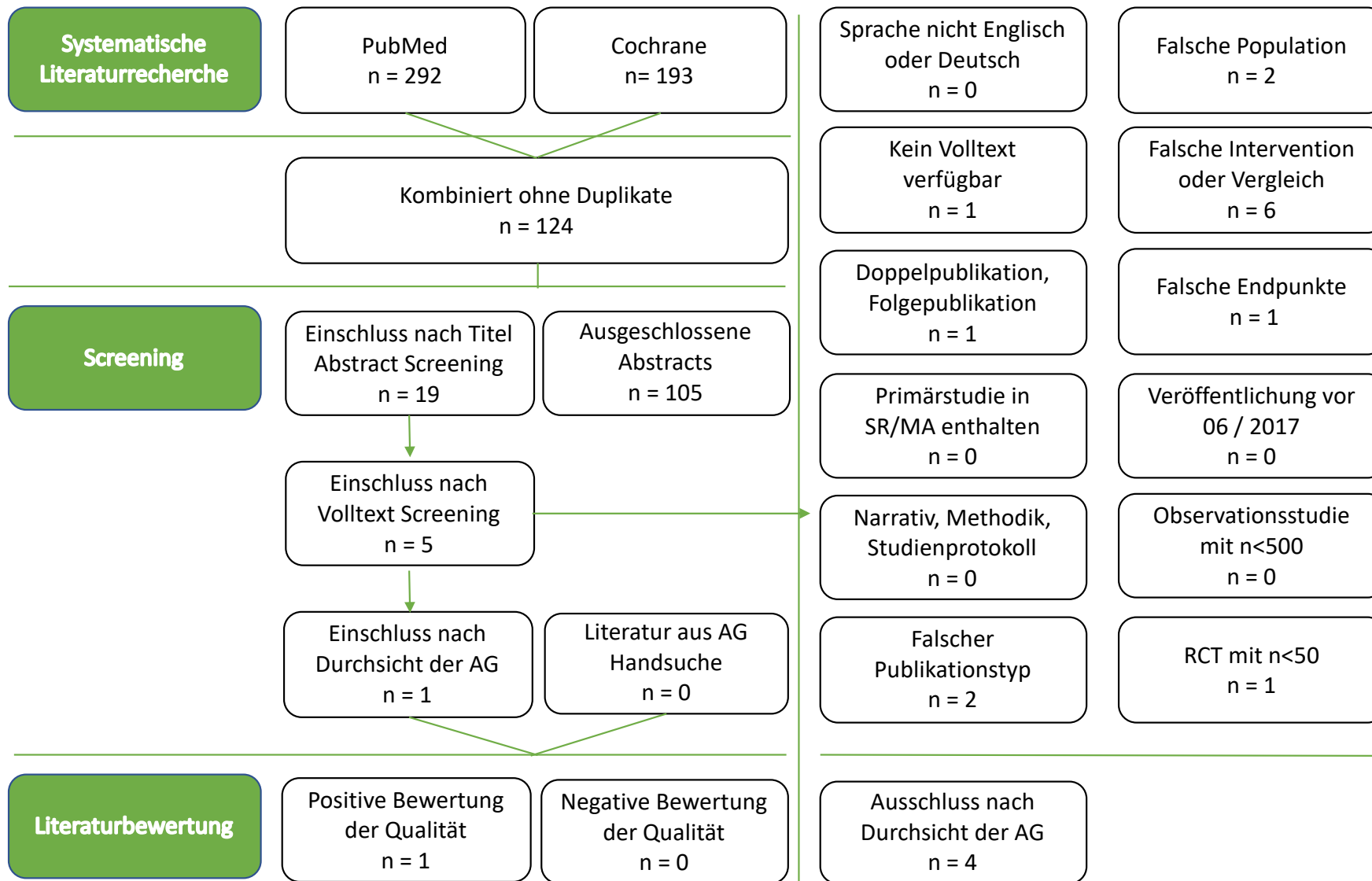
#12	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#13	cohort studies[mesh:noexp] OR longitudinal studies[mesh:noexp] OR follow-up studies[mesh:noexp] OR prospective studies[mesh:noexp] OR cohort[tiab] OR longitudinal[tiab] OR prospective[tiab]	1.869.537
#14	#11 OR #12 OR #13	2.998.629
#15	animals[mh] NOT humans[mh]	4.612.039
#16	#14 NOT #15	2.927.432
#17	#10 AND #16	1.634
#18	#17 Limits: Publication date from 2017/06 to 2019/09, German, English	292

Recherche in der Cochrane Library (27.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	[mh Histopathology] or histopathology or ((pathologic* or histopathologic*) and (staging or stage or assessment)) or ((tumor or histomorphologic* or grad*) and (regress* or regressive changes)) or TRG or ((Mandard or Becker) and classification) ; ti,ab,kw	21523
#11	#9 and #10 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	193

Eingeschlossene Literatur

PICO 08 Pathologie



2. Recherchen zum Thema Kurativ intendierte Therapie

2.1 Endoskopische Therapie: Indikation

<p>PICO 09 Wie sind folgende Verfahren der endoskopischen Therapie (EMR ESD RFA Ablation) für die Behandlung des Ösophaguskarzinoms indiziert?</p> <p><u>Population:</u> Pat. mit gesicherter Dysplasie, in-traepithelialer Neoplasie, gesichertem Plattenepithel- oder Adenokarzinom des Ösophagus bzw. AEG 1-3 (jeweils Mukosa und Sub-mukosakarzinome)</p> <p><u>Interventions:</u> EMR (endoskopischen Mukosare-sektion) / ESD (endoskopische Sub-mukosadisektion) RFA (radio frequency ablation) Ablation</p> <p><u>Comparison:</u> konventionelle operative Verfahren</p> <p><u>Outcomes:</u> Patientenrelevante Endpunkte: Gesamtüberlebensrate, Überlebensrate nach 5 Jahren und 3 Jahren (ggfls. „Ableitung“ aus Überlebenskur-ven, wenn nicht im Text berichtet), medianes Überleben, Letalität, Rate an Lokalrezidiven im Beobachtungszeitraum, Fernmetastasen, Häufigkeit der Eingriffskomplikationen (Perforation, Blutung, Striktur), Morbidität Lebensqualität (QoL)</p>
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Recherche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	"endoscopic mucosal resection"[tiab] OR "endoscopic submucosal dissection"[tiab] OR EMR[tiab] OR ESD[tiab] OR "endoscopic treatment"[tiab] OR "radio frequency ablation"[tiab] OR RFA[tiab] OR "radiofrequency ablation"[tiab] OR "Radiofrequency Ablation"[Mesh] OR "ablative therapy"[tiab] OR "endoscopic ablation"[tiab] OR "Endoscopic Mucosal Resection"[Mesh]	56.126
#10	#8 AND #9	2.715
#11	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183612

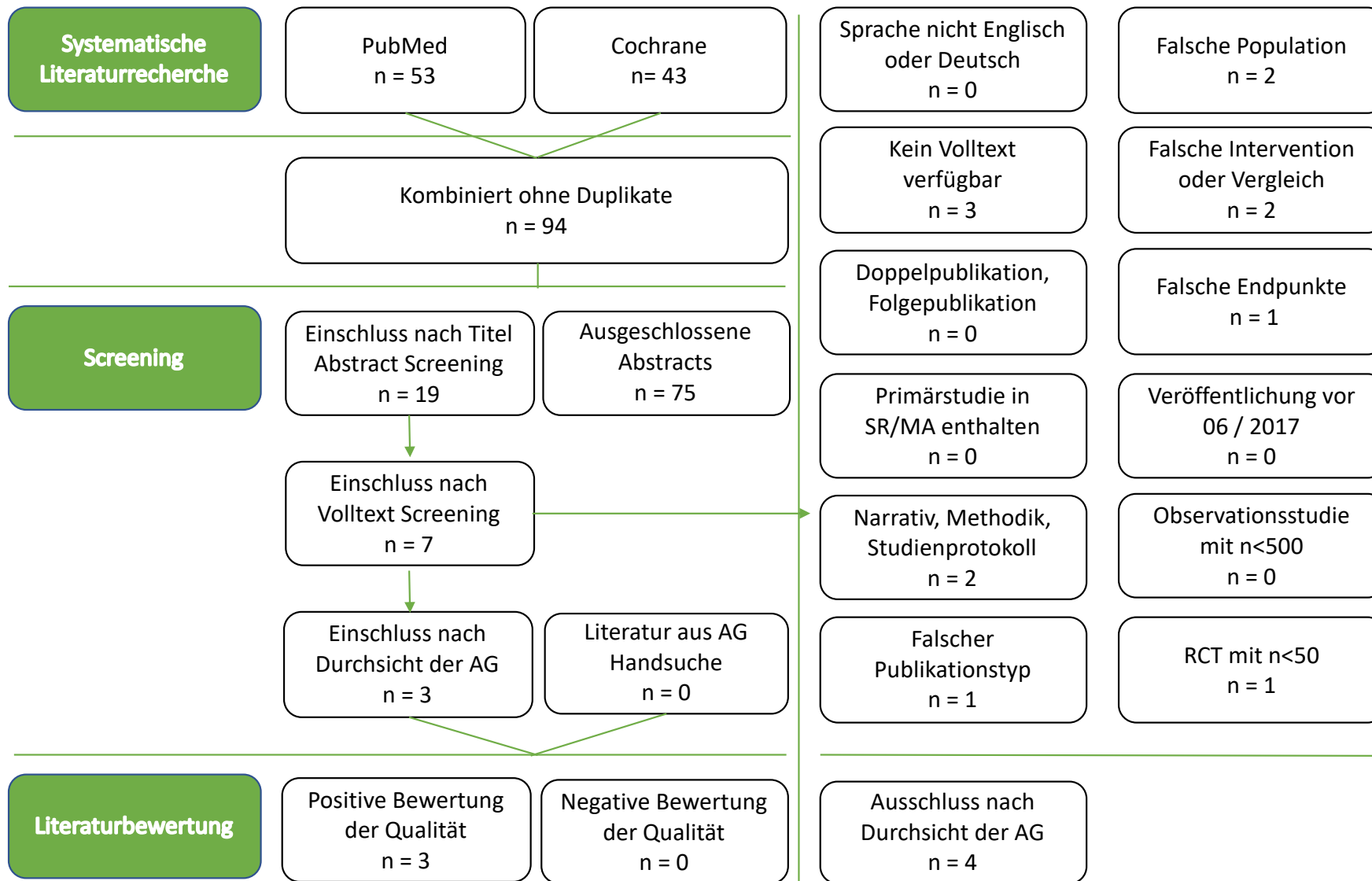
#12	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#13	#11 OR #12	1.509.468
#14	animals[mh] NOT humans[mh]	4.612.039
#15	#13 NOT #14	1.482.589
#16	#10 AND #15	332
#17	#16 Publication date from 2017/06 to 2019/09;English, German	53

Recherche in der Cochrane Library (27.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	endoscopic mucosal resection or "endoscopic submucosal dissection" or EMR or ESD or "endoscopic treatment" or "radio frequency ablation" or RFA or "radiofrequency ablation" or "ablative therapy" or "endoscopic ablation":ti,ab,kw	4887
#11	MeSH descriptor: [Endoscopic Mucosal Resection] explode all trees	52
#12	#10 or #11	4887
#13	indication* or criteria or criterion:ti,ab,kw	228132
#14	#12 and #13	1429
#15	#9 and #14 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	43

Eingeschlossene Literatur
(8-10)

PICO 09 Endoskopische Therapie - Indikation



2.2 Endoskopische Therapie: Vorgehen bei Lokalrezidiv

PICO 10 Wie soll bei Lokalrezidiv nach endoskopischen Verfahren (Resektion, RFA Ablation) vorgegangen werden?

Population: Pat. mit Dysplasie/IEN, gesichertem Lokalrezidiv eines Plattenepithel- oder Adenokarzinom des Ösophagus bzw. AEG 1-3 nach endoskopischer R0-Resektion/ Dissektion

Interventions: Endoskopische Nachresektion /-dissektion, RFA Ablation

Comparison: Konservativ / konventionell-operativ

Outcomes: Patientenrelevante Endpunkte: Gesamtüberlebensrate, Überlebensrate nach 5 Jahren und 3 Jahren (ggfls. „Ableitung“ aus Überlebenskurven, wenn nicht im Text berichtet), medianes Überleben, Morbidität, Lebensqualität (QoL), Letalität, Rate an Rezidiven von Lokalrezidiven im Beobachtungszeit-raum, Häufigkeit der Komplikationen

Recherche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	"endoscopic mucosal resection"[tiab] OR "endoscopic submucosal dissection"[tiab] OR EMR[tiab] OR ESD[tiab] OR "endoscopic treatment"[tiab] OR "radio frequency ablation"[tiab] OR RFA[tiab] OR "radiofrequency ablation"[tiab] OR "Radiofrequency Ablation"[Mesh] OR "ablative therapy"[tiab] OR "endoscopic ablation"[tiab] OR "Endoscopic Mucosal Resection"[Mesh]	56.126
#10	"local recurrence"[tiab] OR "locally recurrent"[tiab] OR "Neoplasm Recurrence, Local"[Mesh] OR recurr*[tiab] OR "Recurrence"[Mesh]	667.244
#11	#9 AND #10	12.149
#12	#8 AND #11	699
#13	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183612

#14	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#15	#13 OR #14	1.509.468
#16	animals[mh] NOT humans[mh]	4.612.039
#17	#15 NOT #16	1.482.589
#18	#12 AND #17	95
#19	#18 Publication date from 2017/06 to 2019/09;English, German	17

Recherche in der Cochrane Library (27.08.19)

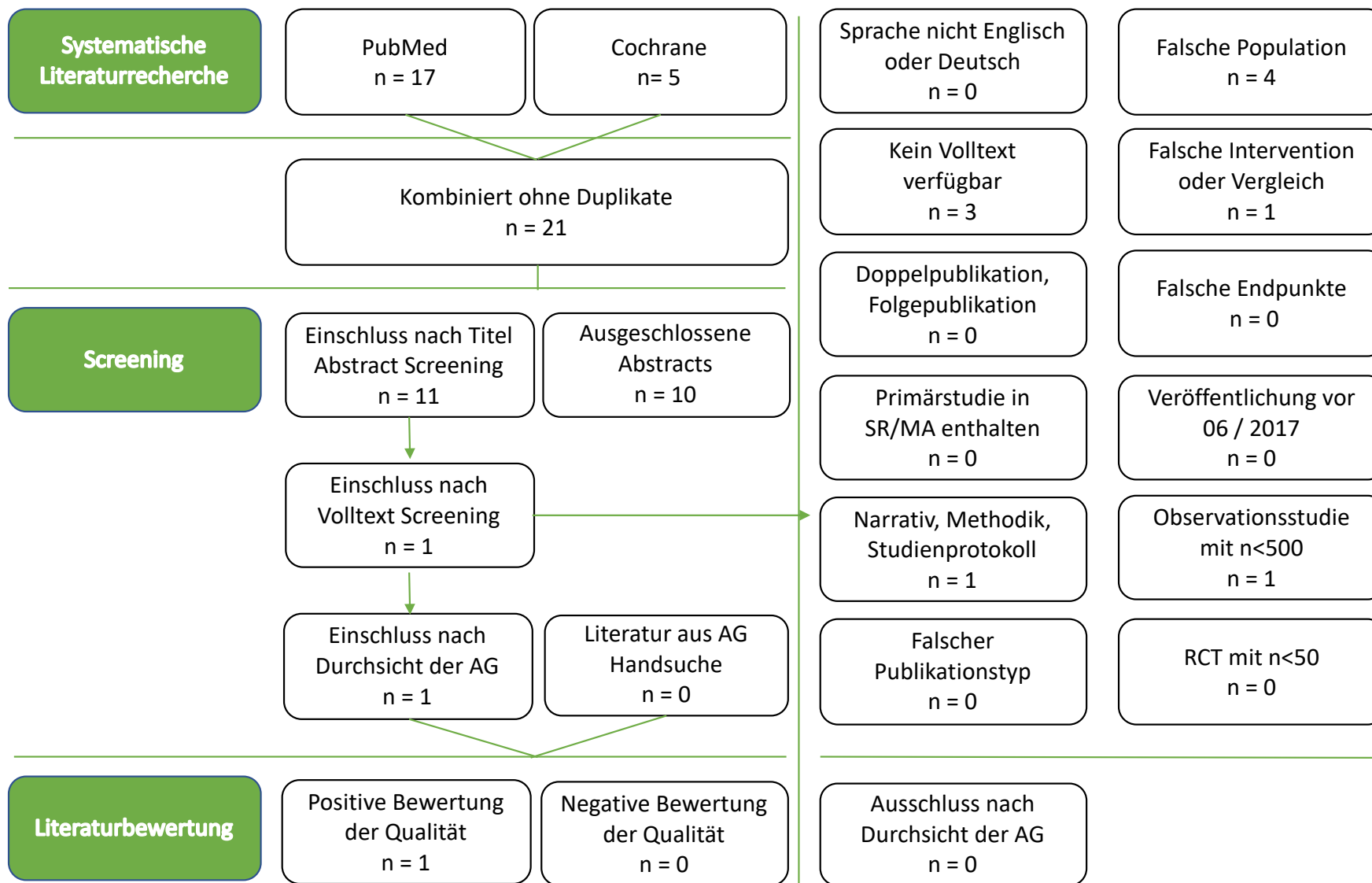
ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	endoscopic mucosal resection or "endoscopic submucosal dissection" or EMR or ESD or "endoscopic treatment" or "radio frequency ablation" or RFA or "radiofrequency ablation" or "ablative therapy" or "endoscopic ablation":ti,ab,kw	4887
#11	MeSH descriptor: [Endoscopic Mucosal Resection] explode all trees	52
#12	#10 or #11	4887
#13	local recurrence or "locally recurrent":ti,ab,kw	2568
#14	MeSH descriptor: [Neoplasm Recurrence, Local] explode all trees	3973
#15	#13 or #14	6108
#16	#12 and #15	141



#17	#9 and #16 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	5
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Eingeschlossene Literatur
(10)

PICO 10 Endoskopische Therapie – Vorgehen



2.3 Chirurgische Therapie: Art des operativen Zugangs

<p>PICO 11 Wie soll die chirurgische Therapie des Ösophagus Karzinoms erfolgen</p> <p><u>Population:</u> 1) Pat. mit gesichertem Plattenepithel- oder Adenokarzinom des Ösophagus in Abhängigkeit von der Tumorhöhe (zervikal, thorakal suprabi-furkal, thorakal-infrabifurkal, abdominell bzw. nur supra-/infrabifurkal) 2) bzw. Pat. mit gesichertem AEG 1-3</p> <p><u>Interventions:</u> offen-thorakal; offen-abdominal-zervikal; offen-abdominal-transhiatal</p> <p><u>Comparison:</u> Standard: offen-abdominothorarakal / thorakoabdominal</p> <p><u>Outcomes:</u> Patientenrelevante Endpunkte: Gesamtüberlebensrate, Überlebensrate nach 5 Jahren und 3 Jahren (ggfls. „Ableitung“ aus Überlebenskurven, wenn nicht im Text berichtet), medianes Überleben, Morbidität, Lebensqualität (QoL), 30 Tage Hospital-Letalität, Rate an Lokalrezidiven im Beobachtungszeit-raum, Fernmetastasierung, Häufigkeit der Komplikationen, (v.a. pulmonale Komplikationen)</p>

Recherche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	surgical[tiab] OR surgery[tiab] OR resect*[tiab] OR oesophagectomy[tiab] OR esophagectomy[tiab] OR gastrectomy[tiab] OR Gastrectomy[Mesh] OR Esophagectomy[Mesh]	1.912.661
#10	thoracic[tiab] OR abdominal[tiab] OR cervical[tiab] OR transhiatal[tiab] OR thoracoscop*[tiab] OR laparoscop*[tiab] OR Laparoscopy[Mesh] OR Thoracoscopy[Mesh]	733.664
#11	#9 AND #10	260.871
#12	#8 AND #11	8.531
#13	“meta-analysis as topic”[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183612

#14	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#15	#13 OR #14	1.509.468
#16	animals[mh] NOT humans[mh]	4.612.039
#17	#15 NOT #16	1.482.589
#18	#12 AND #17	770
#19	#18 Publication date from 2017/06 to 2019/09;English, German	103

Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	surgical or surgery or resection* or oesophagectomy or esophagectomy or gastrectomy:ti,ab,kw	251086
#11	MeSH descriptor: [Gastrectomy] explode all trees	932
#12	MeSH descriptor: [Esophagectomy] explode all trees	347
#13	#10 or #11 or #12	251086
#14	thoracic or abdominal or cervical or transhiatal or thoracoscop* or laparoscop*:ti,ab,kw	96276
#15	MeSH descriptor: [Laparoscopy] explode all trees	5369
#16	MeSH descriptor: [Thoracoscopy] explode all trees	351
#17	#14 or #15 or #16	96308

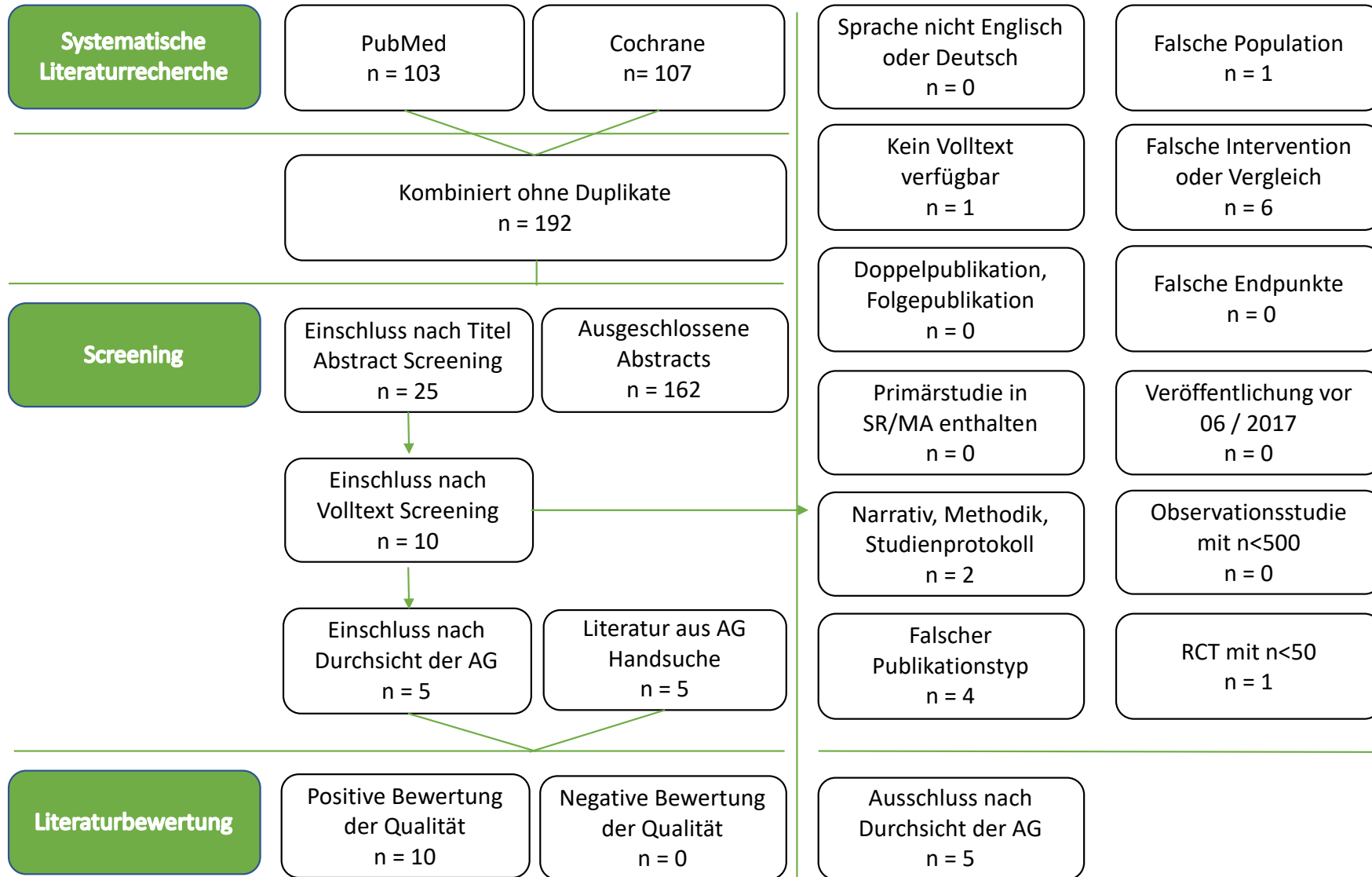


#18	therapy or therapies:ti,ab,kw	647019
#19	#13 and #17 and #18	14776
#20	#9 and #19 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	107

Eingeschlossene Literatur:

(11-20)

PICO 11 Chirurgische Therapie – Art



2.4 Chirurgische Therapie: Ausmaß der Lymphadenektomie

PICO 12 Ausmaß der Lymphadenektomie - Ist die 3-Feld Lmyphadenektomie der 2-Feld Lymphadenektomie vorzuziehen?

Population: 1) Pat. mit gesichertem Plattenepithel- oder Adenokarzinom des Ösophagus 2) bzw. Pat. mit gesichertem AEG 1-3

Interventions: 3-Feld Lymphadenektomie (mediastinal+abd+cerv)

Comparison: Standard 2-Feld-Lymphadenektomie (mediastinal+abd.)

Outcomes: Patientenrelevante Endpunkte: Gesamtüberlebensrate, Überlebensrate nach 5 Jahren und 3 Jahren (ggfls. „Ableitung“ aus Überlebenskurven, wenn nicht im Text berichtet), medianes Überleben, Morbidität, Lebensqualität (QoL), 30 Tage Hospital-Letalität, Rate an Lokalrezidiven im Beobachtungszeitraum, Fernmetastasierung, Häufigkeit der Komplikationen

Suche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	lymphadenectomy[tiab] OR lymph adenectomy[tiab] OR "Lymph Node Excision"[Mesh] OR (lymph[tiab] AND node*[tiab] AND (dissection*[tiab] OR excision*[tiab] OR remov*[tiab]))	72.395
#10	#8 AND #9	3.712
#11	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183612
#12	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR	1.396.141

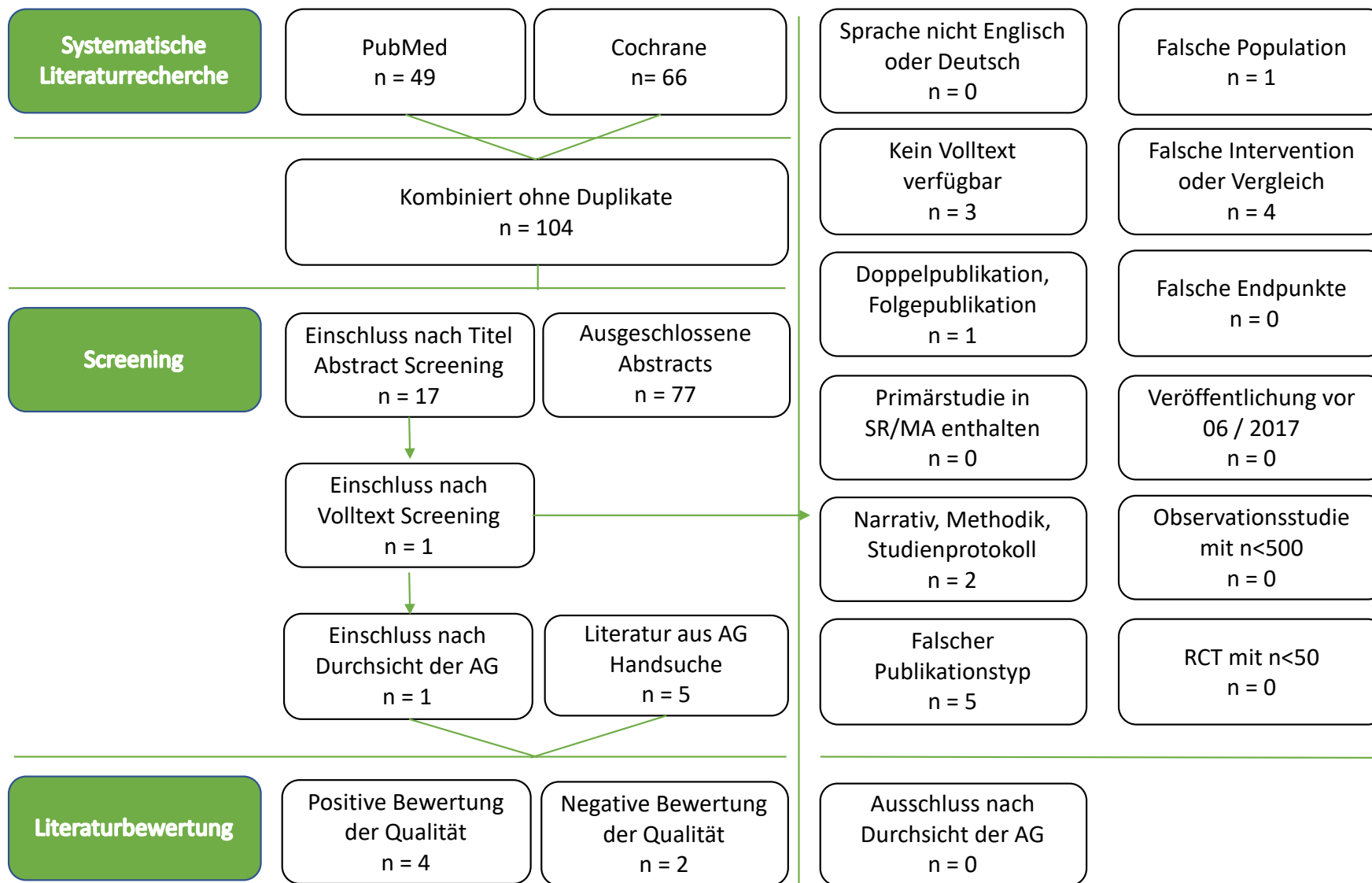
	triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	
#13	#11 OR #12	1.509.468
#14	animals[mh] NOT humans[mh]	4.612.039
#15	#13 NOT #14	1.482.589
#16	#10 AND #15	350
#17	#16 Publication date from 2017/06 to 2019/09;English, German	49

Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	lymphadenectomy or ((lymph node*) and (dissection* or excision*)):ti,ab,kw	4539
#11	MeSH descriptor: [Lymph Node Excision] explode all trees	1265
#12	#10 or #11	4711
#13	#9 and #12 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	66

Eingeschlossene Literatur:
(21-24)

PICO 12 Chirurgische Therapie – Ausmaß



2.5 Multimodale Therapie: Radiotherapie

PICO 13 Verbessert eine adjuvante Radio- oder Radiochemotherapie das Überleben?

Population: 1) Pat. mit Plat-tenepithelkarzinom des Ösophagus (pN0 separat von pN1 (UICC 6th) bzw. pN1-3 (7th Edition) 2) Pat mit Adeno-karzinom des Ösophagus oder des ösophago-gastralen Übergangs pN0 separat von pN1 (UICC 6th) bzw. pN1-3 (7th Edition)

Interventions: Postoperative adjuvante Radio- oder Radiochemotherapie (für RCT simultan; unabhängig von der Dosierung der Radiotherapie und der gewählten Chemotherapie)

Comparison: a) keine post-operative ad-juvante Radio- oder Radio chemotherapie

Outcomes: Überlebensrate nach 5 Jahren und 3 Jahren (ggfls. „Ableitung“ aus Überlebens-kurven, wenn nicht im Text berichtet), medianes Überleben Rate an Lokalrezidiven und Rezidiven insgesamt im Beobachtungs-zeitraum
Häufigkeit schwerer und lebens-bedrohlicher Nebenwirkungen durch die adjuvante Therapie

Suche in PubMed (26.08.9)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	(postoperat*[tiab] OR adjuvant[tiab] OR "after surgery"[tiab]) AND (radiochemotherapy[tiab] OR chemoradiotherapy[tiab] OR chemoradiation[tiab] OR "combined radiation and chemotherapy"[tiab] OR radiotherapy[tiab] OR "Radiotherapy"[Mesh] OR radiation*[tiab]) OR "Combined Modality Therapy"[Mesh]	283.949
#10	#8 AND #9	9.149
#11	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183612

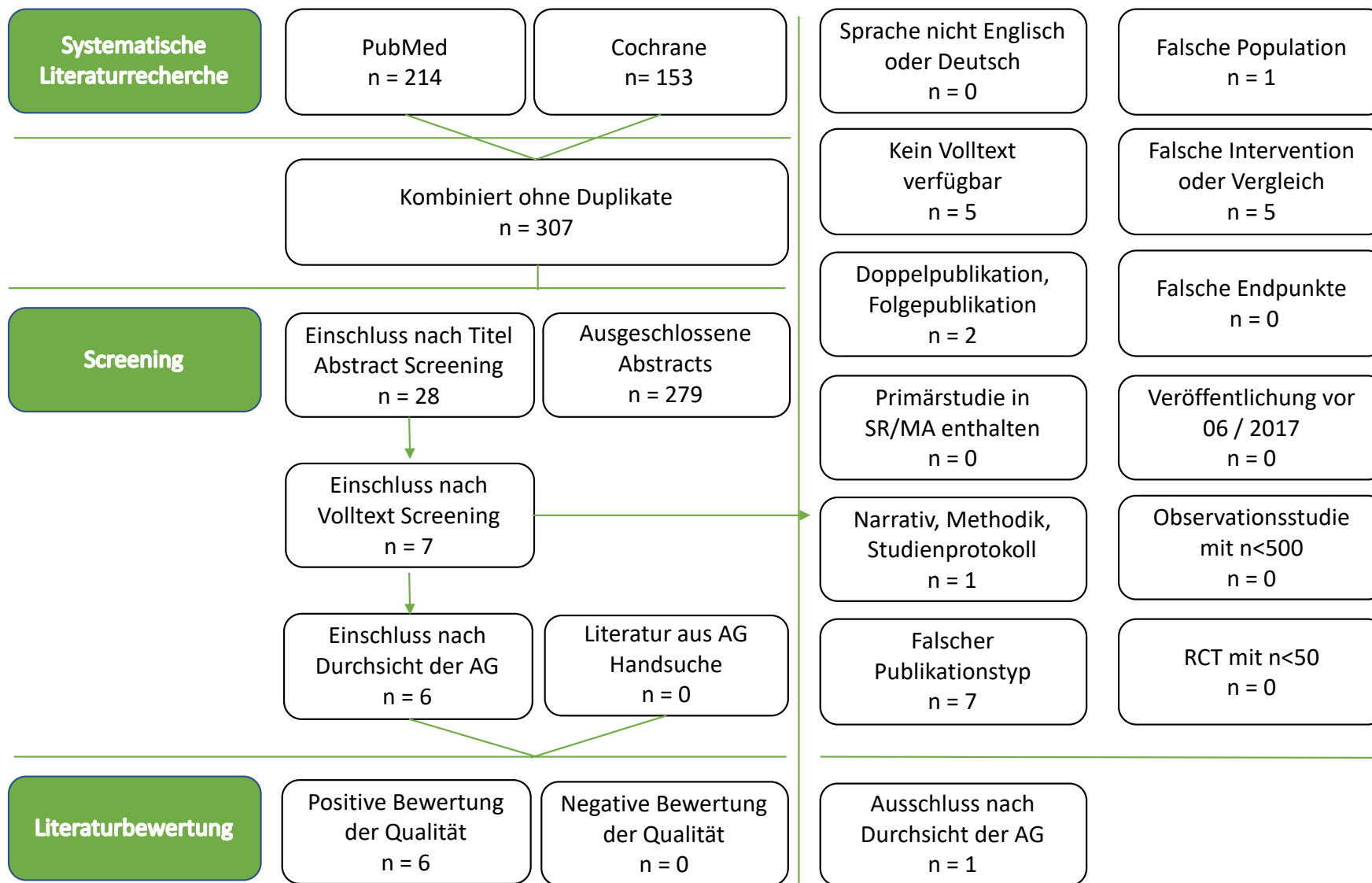
#12	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#13	#11 OR #12	1.509.468
#14	animals[mh] NOT humans[mh]	4.612.039
#15	#13 NOT #14	1.482.589
#16	#10 AND #15	2.392
#17	#16 Publication date from 2017/06 to 2019/09;English, German	214

Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	MeSH descriptor: [Combined Modality Therapy] explode all trees	20580
#11	postoperat* or adjuvant or "after surgery":ti,ab,kw	147805
#12	MeSH descriptor: [Radiotherapy] explode all trees	5919
#13	radiochemotherapy or chemoradiotherapy or chemoradiation or "combined radiation and chemotherapy" or radiotherapy or radiotherapy or radiation*:ti,ab,kw	46386
#14	#12 or #13	46573
#15	#14 and #11	11380
#16	#15 or #10	29336
#17	#16 and #9 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	153

Eingeschlossene Literatur:
(25-30)

PICO 13 Multimodale Therapie – Radiotherapie



2.6 Multimodale Therapie: Chemotherapie

PICO 14 Verbessert eine adjuvante Chemotherapie das Überleben?

Population: 1. Patienten mit Plat-tenepithelkarzinom des Ösophagus bei pN0 und separat bei pN1 (UICC6th) oder pN1-3 (UICC 7th) nach R0-Resektion 2) Pat. mit Adeno-karzinom des Ösophagus oder des ösophago-gastralen Übergangs bei pN0 und bei pN1 (UICC6th) oder pN1-3 (UICC 7th) nach R0-Resektion

Interventions:

Postoperative Chemotherapie

Comparison:

keine postoperative Chemotherapie

Outcomes:

Überlebensrate nach 5 Jahren und 3 Jahren (ggfls. „Ableitung“ aus Überlebenskurven, wenn nicht im Text berichtet), medianes Überleben, Rate an Fern- und Lokalrezidiven, Häufigkeit schwerer und lebens-bedrohlicher Nebenwirkungen durch die Chemotherapie

Suche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	((postoperative[tiab] OR adjuvant[tiab] OR "after surgery"[tiab]) AND (chemotherapy[tiab] OR 5-fluorouracil[tiab] OR capecitabine[tiab] OR carboplatin[tiab] OR cisplatin[tiab] OR docetaxel[tiab] OR epirubicin[tiab] OR epirubicine[tiab] OR fluoropyrimidine[tiab] OR "folinic acid"[tiab] OR irinotecan[tiab] OR leucovorin[tiab] OR oxaliplatin[tiab] OR paclitaxel[tiab])) OR "Chemotherapy, Adjuvant"[Mesh])	82.914
#10	#8 AND #9	3.066
#11	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183612

#12	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#13	#11 OR #12	1.509.468
#14	animals[mh] NOT humans[mh]	4.612.039
#15	#13 NOT #14	1.482.589
#16	#10 AND #15	846
#17	#16 Publication date from 2017/06 to 2019/09;English, German	90

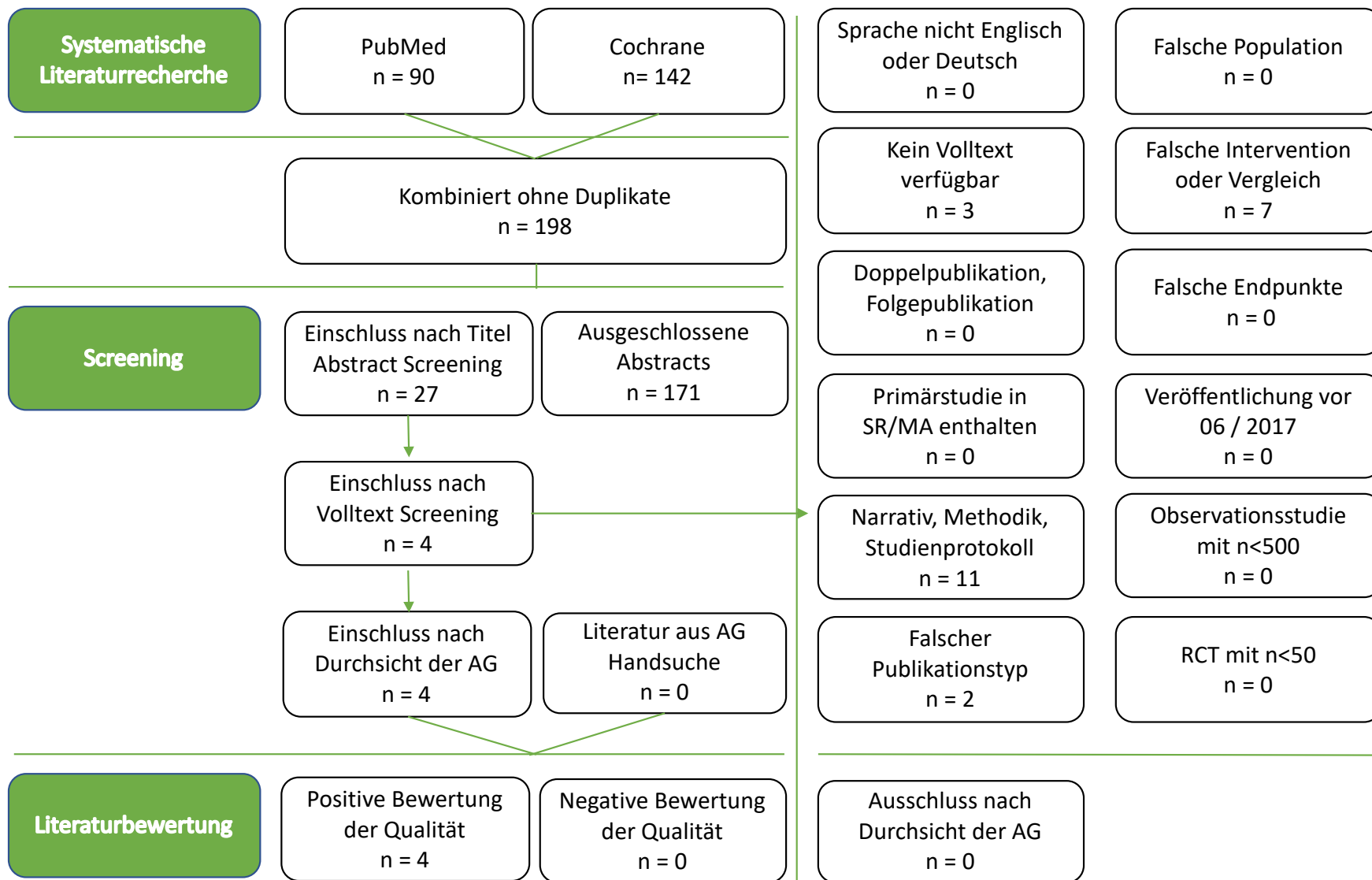
Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	postoperative or adjuvant or "after surgery":ti,ab,kw	142396
#11	chemotherapy or 5 fluorouracil or 5fu or capecitabine or carboplatin or cisplatin or docetaxel or epirubicin or epirubicine or fluoropyrimidine or folinic acid or irinotecan or leucovorin or oxaliplatin or paclitaxel:ti,ab,kw	88497
#12	MeSH descriptor: [Chemotherapy, Adjuvant] explode all trees	3654
#13	#10 and #11	19572
#14	#13 or #12	19572
#15	#9 and #14 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019, in Trials	142



Eingeschlossene Literatur:
(27, 29-31)

PICO 14 Multimodale Therapie – Chemotherapie



2.7 Multimodale Therapie: Prä-/Postoperative Chemotherapie

PICO 15 Verbessert eine präoperative bzw. prä- und postoperative fortgesetzte Chemotherapie das Überleben?

Population: 1) Pat. mit Plat-tenoepithelkarzinom des Ösophagus (Stadium bis T2N1M0 (UICC6th) bzw. bis T2N1-3M0 (UICC7th) separat von Stadium T3-4 Nalle M0
2) Pat. mit Adeno-karzinom des Ösophagus oder des ösophago-gastralen Übergangs (Stadium bis T2N1M0 (UICC6th) bzw. bis T2N1-3M0 (UICC7th) separat von Stadium T3-4 Nalle M0
Interventions: neoadjuvante Chemotherapie unabhängig von Art und Dauer
Comparison: keine neoadjuvante Therapie=chirurgische Therapie
Outcomes: Überlebensrate nach 5 Jahren und 3 Jahren (ggfls. „Ableitung“ aus Überlebenskurven, wenn nicht im Text berichtet), medianes Überleben Rate an R0-Resektionen, Rate an Fernrezidiven, Häufigkeit schwerer und lebensbedrohlicher Nebenwirkungen durch die Chemotherapie in der präoperativen und postoperativen Phase

Suche in PubMed (26.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.242.048
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.126
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.050
#4	#1 OR #2 OR #3	4.059.386
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.486
#6	Cardia[MeSH] OR cardia[tiab]	8.526
#7	#5 OR #6	189.390
#8	#4 AND #7	79.948
#9	chemotherap*[tiab] OR chemo therap*AND (preoperative[tiab] OR pre-operative[tiab] OR pre operative[tiab] OR "followed surgery"[tiab] OR neoadjuvant[tiab] OR perioperative[tiab]) OR "Neoadjuvant Therapy"[Mesh]	40.783
#10	(5-fluorouracil[tiab] OR capecitabin*[tiab] OR carboplatin[tiab] OR cisplatin[tiab] OR docetaxel[tiab] OR epirubicin[tiab] OR epirubicin*[tiab] OR fluoropyrimidin*[tiab] OR "folinic acid"[tiab] OR irinotecan[tiab] OR leucovorin[tiab] OR oxaliplatin[tiab] OR paclitaxel[tiab]) AND (preoperativ*[tiab] OR pre operative[tiab] OR pre-operativ*[tiab] OR "followed surgery"[tiab] OR neoadjuvant[tiab] OR perioperativ*[tiab] OR peri-operativ*[tiab])	9.570
#11	#9 OR #10	42.089
#12	#8 AND #11	3.793
#13	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183612

#14	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.141
#15	#13 OR #14	1.509.468
#16	animals[mh] NOT humans[mh]	4.612.039
#17	#15 NOT #16	1.482.589
#18	#12 AND #17	1.040
#19	#18 Publication date from 2017/06 to 2019/09;English, German	144

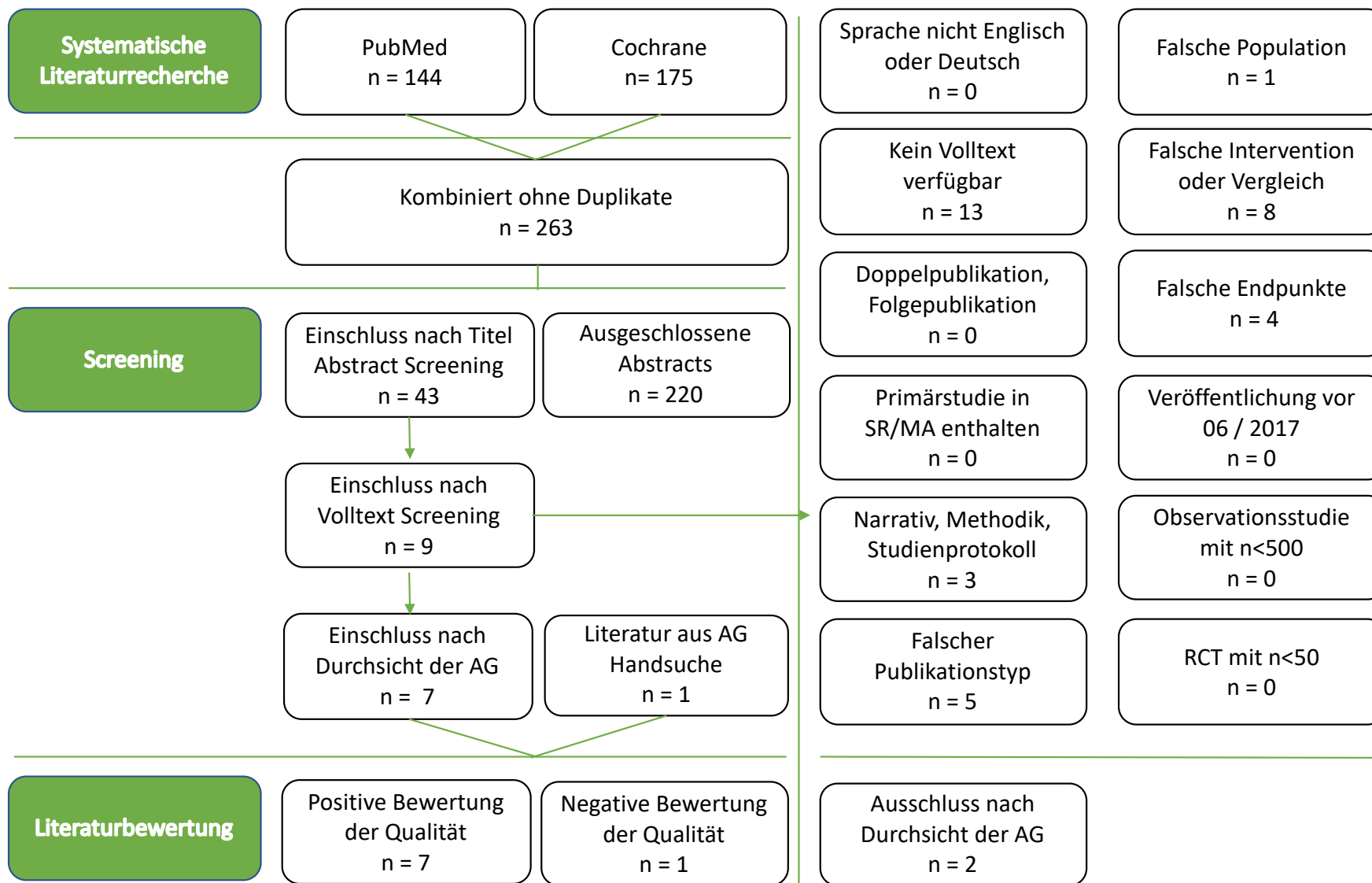
Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	chemotherapy:ti,ab,kw	70097
#11	preoperative or pre-operative or "followed surgery" or neoadjuvant or perioperative:ti,ab,kw	52550
#12	#10 and #11	7614
#13	MeSH descriptor: [Neoadjuvant Therapy] explode all trees	1044
#14	#12 or #13	7822
#15	5 fluorouracil or capecitabin* or carboplatin or cisplatin or docetaxel or epirubicin or epirubicin* or fluoropyrimidin* or "folinic acid" or irinotecan or leucovorin or oxaliplatin or paclitaxel:ti,ab,kw	38161

#16	preoperativ*OR pre-operativ* or "followed surgery" or neoadjuvant or perioperativ* or peri-operativ*:ti,ab,kw	26117
#17	#15 and #16	3921
#18	#14 or #17	8424
#19	#9 and #18 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	175

Eingeschlossene Literatur:
(27, 29, 32-36)

PICO 15 Multimodale Therapie – prä-/postoperative Chemotherapie



2.8 Multimodale Therapie: Prä-operative Radiochemotherapie

PICO 16 Verbessert eine präoperative Radiochemotherapie das Überleben?

Population: 1) Pat. mit Plattenepithelkarzinom des Ösophagus (Stadium bis T2N1M0 (UICC6th) bzw. bis T2N1-3M0 (UICC7th), separat von Stadium T3-4NalleM0
2) Pat. mit Adeno-karzinom des Ösophagus oder des ösophago-gastralen Übergangs (Stadium bis T2N1M0 (UICC6th) bzw. bis T2N1-3M0 (UICC7th) separat von Stadium T3-4NalleM0

Interventions: Neoadjuvante Radiochemotherapie (simultane RCT unabhängig von der Dosierung der Radiotherapie und der gewählten Chemotherapie)

Comparison: a) keine neoad-juvante Therapie=chirurgische Therapie oder neoad-juvante Chemotherapie ohne Radiotherapie

Outcomes: Überlebensrate nach 5 Jahren und 3 Jahren (ggfls. „Ableitung“ aus Überlebens-kurven, wenn nicht im Text be-richtet), medianes Überleben, Rate an R0-Resektionen, Rate an Lokal- und Fernrezidiven, Häufigkeit schwerer und lebensbedrohlicher Nebenwirkungen durch die Chemotherapie in der präoperativen und postoperativen Phase

Suche in PubMed (27.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.243.006
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.217
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.531
#4	#1 OR #2 OR #3	4.060.138
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.507
#6	Cardia[MeSH] OR cardia[tiab]	8.529
#7	#5 OR #6	189.411
#8	#4 AND #7	79.960
#9	(radiochemotherapy[tiab] OR chemoradiotherapy[tiab] OR "Chemoradiotherapy"[Mesh] OR chemoradiation[tiab]) AND (preoperative[tiab] OR pre-operative[tiab] OR "followed surgery"[tiab] OR neoadjuvant[tiab] OR "Neoadjuvant Therapy"[Mesh])	10.194
#10	#8 AND #9	2.370
#11	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183682

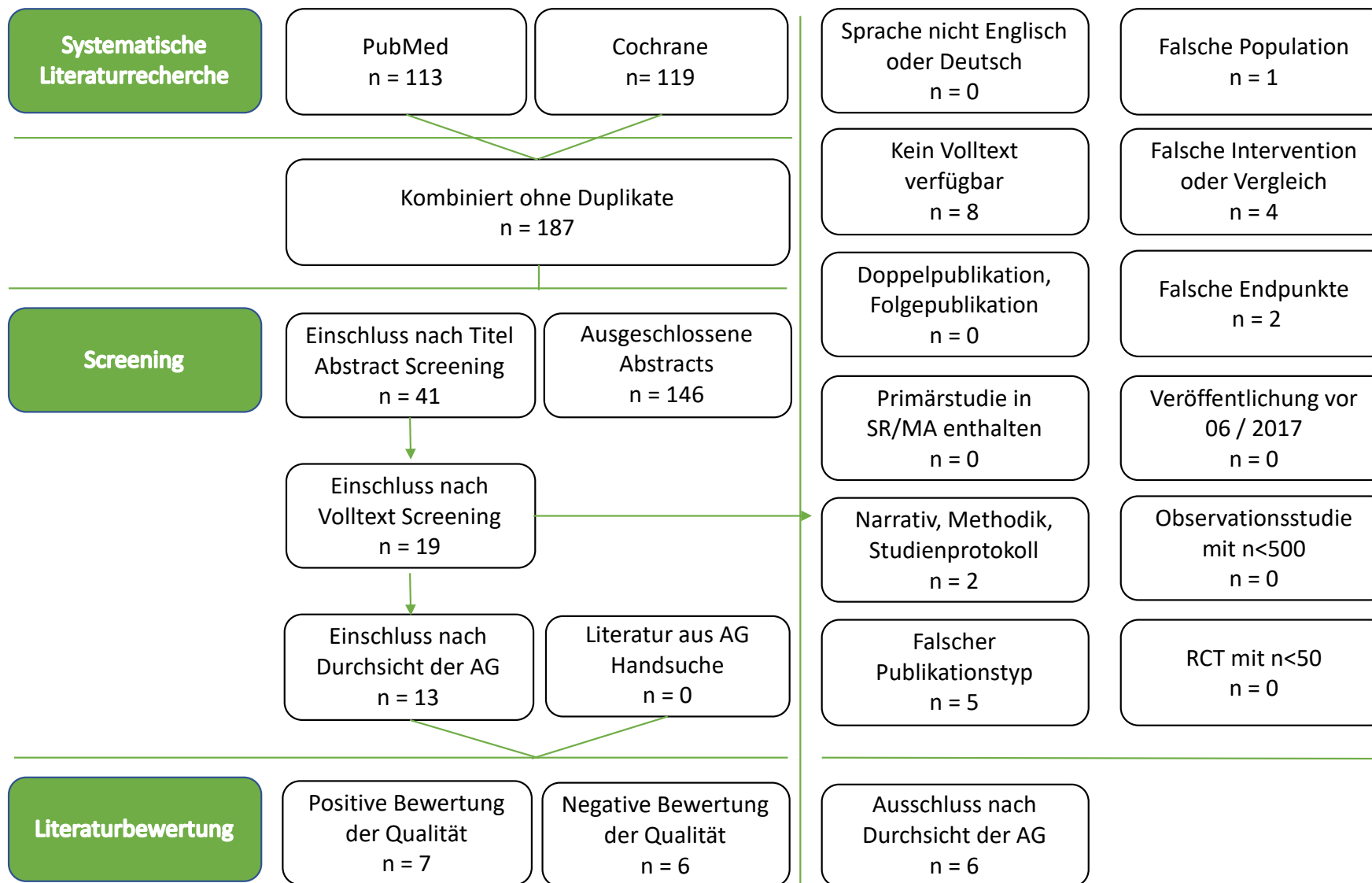
#12	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.461
#13	#11 OR #12	1.509.833
#14	animals[mh] NOT humans[mh]	4.612.039
#15	#13 NOT #14	1.482.952
#16	#10 AND #15	652
#17	#16 Publication date from 2017/06 to 2019/09;English, German	113

Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	MeSH descriptor: [Chemoradiotherapy] explode all trees	768
#11	radiochemotherapy or chemoradiotherapy or chemoradiation:ti,ab,kw	7200
#12	#10 or #11	7200
#13	MeSH descriptor: [Neoadjuvant Therapy] explode all trees	1044
#14	preoperative or pre-operative or "followed surgery" or neoadjuvant:ti,ab,kw	39933
#15	#13 or #14	39933
#16	#12 and #15	1958
#17	#9 and #16 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	119

Eingeschlossene Literatur:

PICO 16 Multimodale Therapie – präoperative Radiochemotherapie



2.9 Multimodale Therapie: definitive Radiochemotherapie

PICO 17 Stellenwert und Indikation der definitiven Radiochemotherapie?
<p>Population: 1) Pat. mit nicht fernmetastasiertem Plattenepithelkarzinom des Ösophagus (Stadium Talle Nalle M0) 2) Pat. mit nicht fernmetastasiertem Adenokarzinom des Ösophagus oder des ösophago-gastralen Übergangs (Stadium Talle Nalle M0)</p> <p>Interventions: definitive simultane Radiochemotherapie (mindestens 30 Gy (unabhängig von der Fraktionierung und der gewählten Chemotherapie)</p> <p>Comparison: OP alleine oder multimodale Verfahren unter Einschluss der OP</p> <p>Outcomes: a) Überlebensrate nach 5 Jahren und 3 Jahren (ggfls. „Ableitung“ aus Überlebenskurven, wenn nicht im Text berichtet), medianes Überleben b) Rate an Lokal- und Fernrezidiven d) Letalität durch die Radiochemotherapie im Vergleich zu anderen Therapieverfahren</p>

Suche in PubMed (27.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.243.006
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.217
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.531
#4	#1 OR #2 OR #3	4.060.138
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.507
#6	Cardia[MeSH] OR cardia[tiab]	8.529
#7	#5 OR #6	189.411
#8	#4 AND #7	79.960
#9	definit*[tiab] AND (radiochemotherap*[tiab] OR chemoradiotherap*[tiab] OR chemoradiation[tiab] OR "combined radiation and chemotherapy"[tiab] OR chemoradio*[tiab] OR radiochemo*[tiab] OR "Chemoradiotherapy"[Mesh] OR (radiotherap*[tiab] AND chemotherap*[tiab]))	5.322
#10	#8 AND #9	1.101
#11	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183682

#12	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.461
#13	#11 OR #12	1.509.833
#14	animals[mh] NOT humans[mh]	4.612.039
#15	#13 NOT #14	1.482.952
#16	#10 AND #15	255
#17	#16 Publication date from 2017/06 to 2019/09;English, German	50

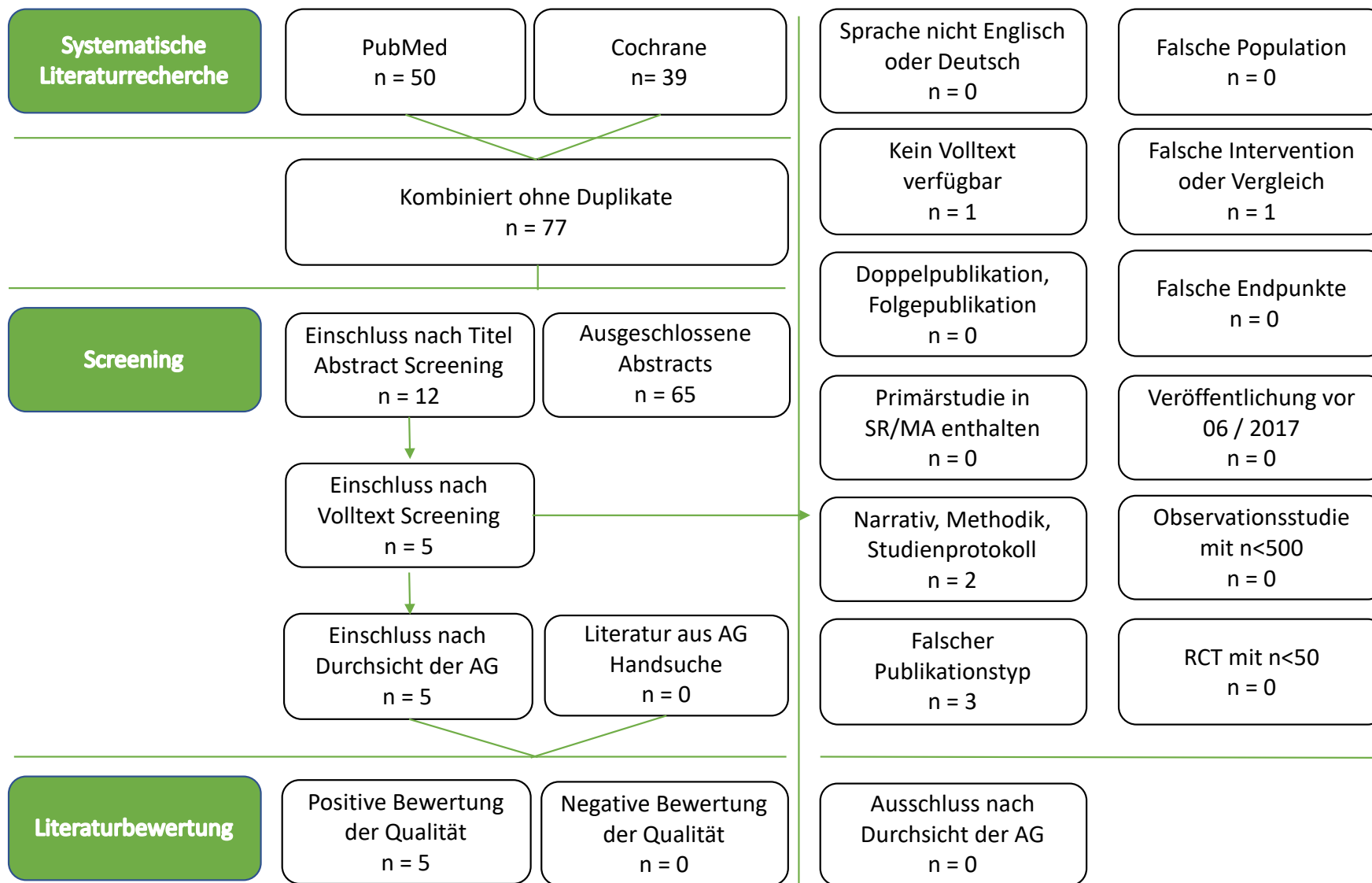
Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	radiochemotherapy or chemoradiotherapy or chemoradiation or "combined radiation and chemotherapy":ti,ab,kw	7265
#11	MeSH descriptor: [Chemoradiotherapy] explode all trees	768
#12	#10 or #11	7265
#13	definitive:ti,ab,kw	7938
#14	#12 and #13	512
#15	#9 and #14 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	39

Eingeschlossene Literatur:



PICO 17 Multimodale Therapie – definitive Radiochemotherapie



2.10 Multimodale Therapie: PET-CT

PICO 18 Rolle des PET-CTs, endoskopischem Ultraschall, Kontrastmittel Spiral-CT und Endoskopie zur Therapieprädiktion / Remissionsvorhersage?

Population: 1) Pat. (die Therapie bekommen) mit gesichertem

Plattenepithelkarzinom o. mit Adenokarzinom des Ösophagus oder AEG 1-3 unter präoperativer Chemotherapie separat von präoperativer Radiochemotherapie

Interventions: a) frühe Verlaufs-kontrolle (innerhalb von 2 Wochen nach Therapiebeginn)

b) späte Verlaufs-kontrolle (zum Abschluss der Therapie bzw. vor der geplanten Operation)

Comparison: 1) Kein PET-CT 2) bzw. kein endoskopischer Ultraschall 3) bzw. kein Kontrastmittel-Spiral-CT 4) bzw. keine Endoskopie

Outcomes: Vorhersagewahrscheinlichkeit für klinisch komplette Remission, histologisches Ansprechen nach Therapie, progressionsfreies Überleben und Gesamtüberleben durch die frühe bzw. späte Untersuchung (PET-CT bzw. EUS bzw. CT bzw. Endoskopie)

Suche in PubMed (27.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.243.006
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.217
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.531
#4	#1 OR #2 OR #3	4.060.138
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.507
#6	Cardia[MeSH] OR cardia[tiab]	8.529
#7	#5 OR #6	189.411
#8	#4 AND #7	79.960
#9	((((endoscopic*[tiab] AND (US[tiab] OR ultrasonography[tiab] OR ultrasound[tiab] OR "tri-modal imaging"[tiab])) OR EUS[tiab] OR endosonography[tiab] OR endosonograph*[tiab] OR ("curved array"[tiab] OR radial[tiab]) AND echoendoscop*[tiab])) OR (((contrast-enhanced[tiab] OR spiral[tiab] OR helical[tiab] OR multidetector[tiab] OR multisection[tiab] OR multislice[tiab]) AND ("computerised tomography"[tiab] OR CT[tiab] OR "computed tomography"[tiab])) OR 3D-CT[tiab]) OR (pet[tiab] OR petscan[tiab] OR PET-CT[tiab] OR "PET scan"[tiab] OR FDG-PET[tiab] OR PET-CT[tiab] OR ("Positron Emission Tomography"[tiab] OR PET[tiab]) AND (Computed[tiab] OR Computerized[tiab]) AND Tomography[tiab])) OR (endoscopy[tiab] OR endoscopic procedure[tiab])) OR "Endosonography"[Mesh] OR "Endoscopy"[Mesh] OR "Positron-Emission Tomography"[Mesh] OR "Positron Emission Tomography Computed Tomography"[Mesh] OR "Tomography, Spiral Computed"[Mesh]	533.422
#10	"follow up"[tiab] OR monitoring[tiab] OR surveillance[tiab] OR (respon*[tiab] AND (assessment[tiab] OR control[tiab] OR	4.027.787

	evaluat*[tiab] OR measur*[tiab])) OR "prognostic significance"[tiab] OR (predict*[tiab] AND (respon*[tiab] OR prognos*[tiab] OR utility[tiab] OR outcome[tiab])) OR "Prognosis"[Mesh]	
#11	#9 AND #10	167.804
#12	#8 AND #11	7.750
#13	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183682
#14	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.461
#15	#13 OR #14	1.509.833
#16	animals[mh] NOT humans[mh]	4.612.039
#17	#15 NOT #16	1.482.952
#18	#12 AND #17	1.031
#19	#18 Publication date from 2017/06 to 2019/09;English, German	101

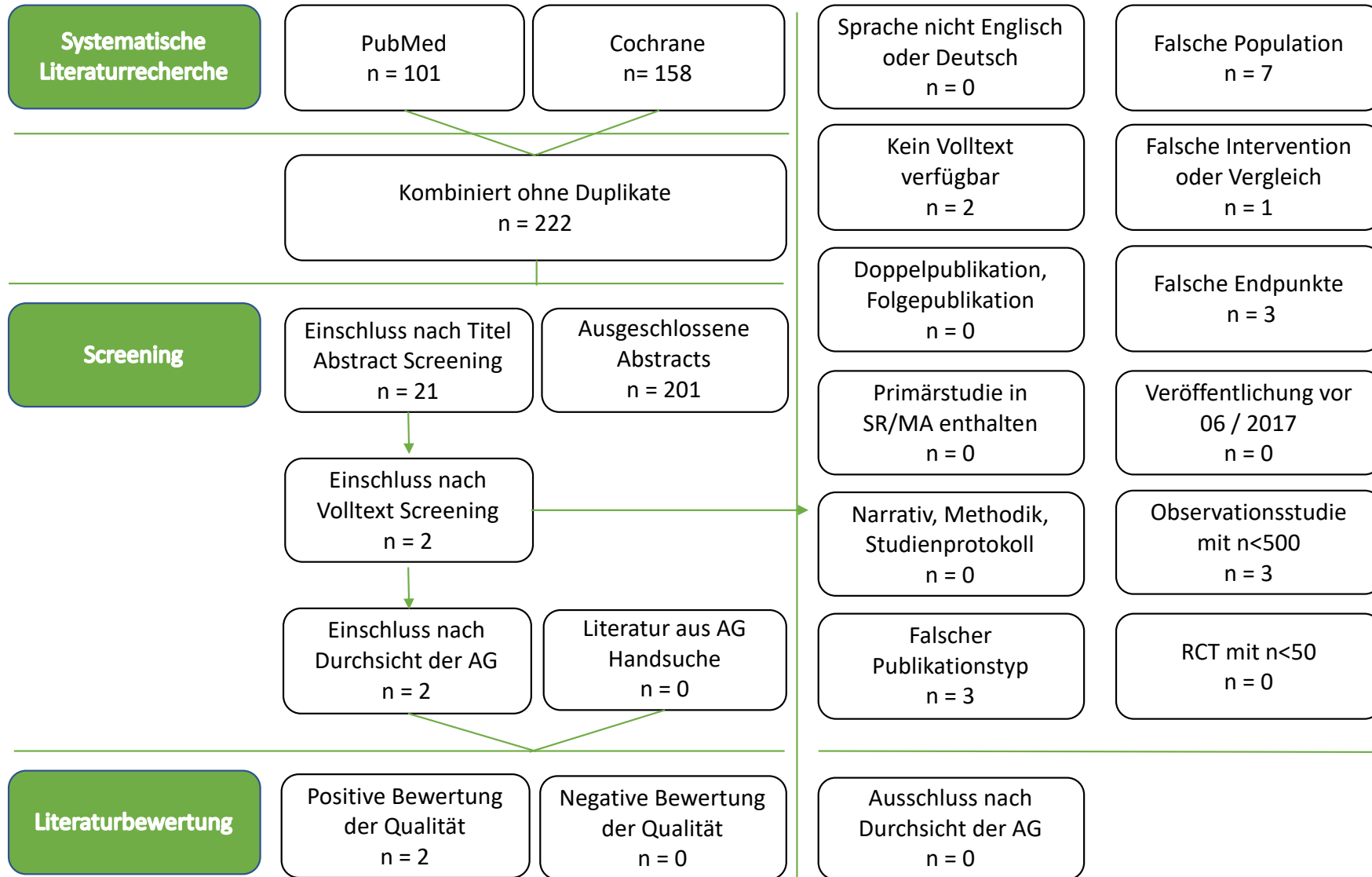
Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	endoscopic* and (US or ultrasonography or ultrasound or "tri-modal imaging") or EUS or endosonography or endosonograph*:ti,ab,kw	19531

#11	("curved array" or radial) and (echoendoscop* or echo-endoscop*):ti,ab,kw	10
#12	(contrast-enhanced or spiral or helical or multidetector or multisection or multislice) and ("computerised tomography" or CT or "computed tomography") or 3D-CT:ti,ab,kw	2994
#13	(pet or petscan or PET-CT or "PET scan" or FDG-PET or PET-CT) or ("Positron Emission Tomography" and (Computed or Computerized) and Tomography):ti,ab,kw	7165
#14	endoscopy or endoscopic procedure:ti,ab,kw	18564
#15	MeSH descriptor: [Endosonography] explode all trees	329
#16	MeSH descriptor: [Endoscopy] explode all trees	16513
#17	MeSH descriptor: [Positron-Emission Tomography] explode all trees	996
#18	MeSH descriptor: [Tomography, Spiral Computed] explode all trees	330
#19	#10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18	47654
#20	follow up or monitoring or surveillance or (response and (assessment or control or evaluation or measuring)) or "prognostic significance" or (predict* and (respon* or prognos* or utility or outcome)):ti,ab,kw	380486
#21	MeSH descriptor: [Prognosis] explode all trees	144630
#22	#20 or #21	453978
#23	#19 and #22	19251
#24	#9 and #23 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	158

Eingeschlossene Literatur:
(1, 45)

PICO 18 Multimodale Therapie – PET-CT



3. Recherchen zum Thema Palliation

3.1 Indikation, Nutzen und Schaden der palliativen Chemotherapie

PICO 19 Indikation, Nutzen und Schaden der palliativen Chemotherapie
Population: Patienten im Stadium IV und mit lokoregionär fortgeschrittenen, primär inoperablen Plattenepithel- und Adenokarzinomen des Ösophagus und Adenokarzinomen des gastroösophagealen Übergangs 1-3
Interventions: 1) palliative Chemotherapie 2) Zweitlinienchemotherapie palliativ
Comparison: andere Verfahren, Medikamente
Outcomes: Lebensqualität (QoL), Nutzen, Schaden (Therapie Nebenwirkungen/Toxizität), Perforation, Blutung, Todesfall, Remissionsrate, Progressionsfreies Überleben, Symptomfreies Überleben (symptomfree survival) (time without signs and symptoms) Gesamtüberlebensrate/Überlebenszeit Speziell für 6) Stentimplantation zusätzlich: Dysphagiefreies Überleben ohne Stentverschluß, Dysphagieminderung

Suche in PubMed (27.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.243.006
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.217
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.531
#4	#1 OR #2 OR #3	4.060.138
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.507
#6	Cardia[MeSH] OR cardia[tiab]	8.529
#7	#5 OR #6	189.411
#8	#4 AND #7	79.960
#9	palliat*[tiab] OR advanced[tiab] OR metastatic[tiab] OR "Palliative Medicine"[Mesh]	633.615
#10	chemotherapy[tiab] OR capecitabin*[tiab] OR catumaxomab[tiab] OR cetuximab[tiab] OR cisplatin[tiab] OR docetaxel[tiab] OR doxorubicin[tiab] OR epirubicin[tiab] OR epirubicin*[tiab] OR etoposid*[tiab] OR fluoropyrimidin*[tiab] OR fluorouracil[tiab] OR irinotecan[tiab] OR leucovorin[tiab] OR methotrexat*[tiab] OR mitomycin[tiab] OR oxaliplatin[tiab] OR S-1[tiab] OR trastuzumab[tiab]	537.387
#11	#9 AND #10	109.600
#12	#8 AND #11	4.359
#13	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183682

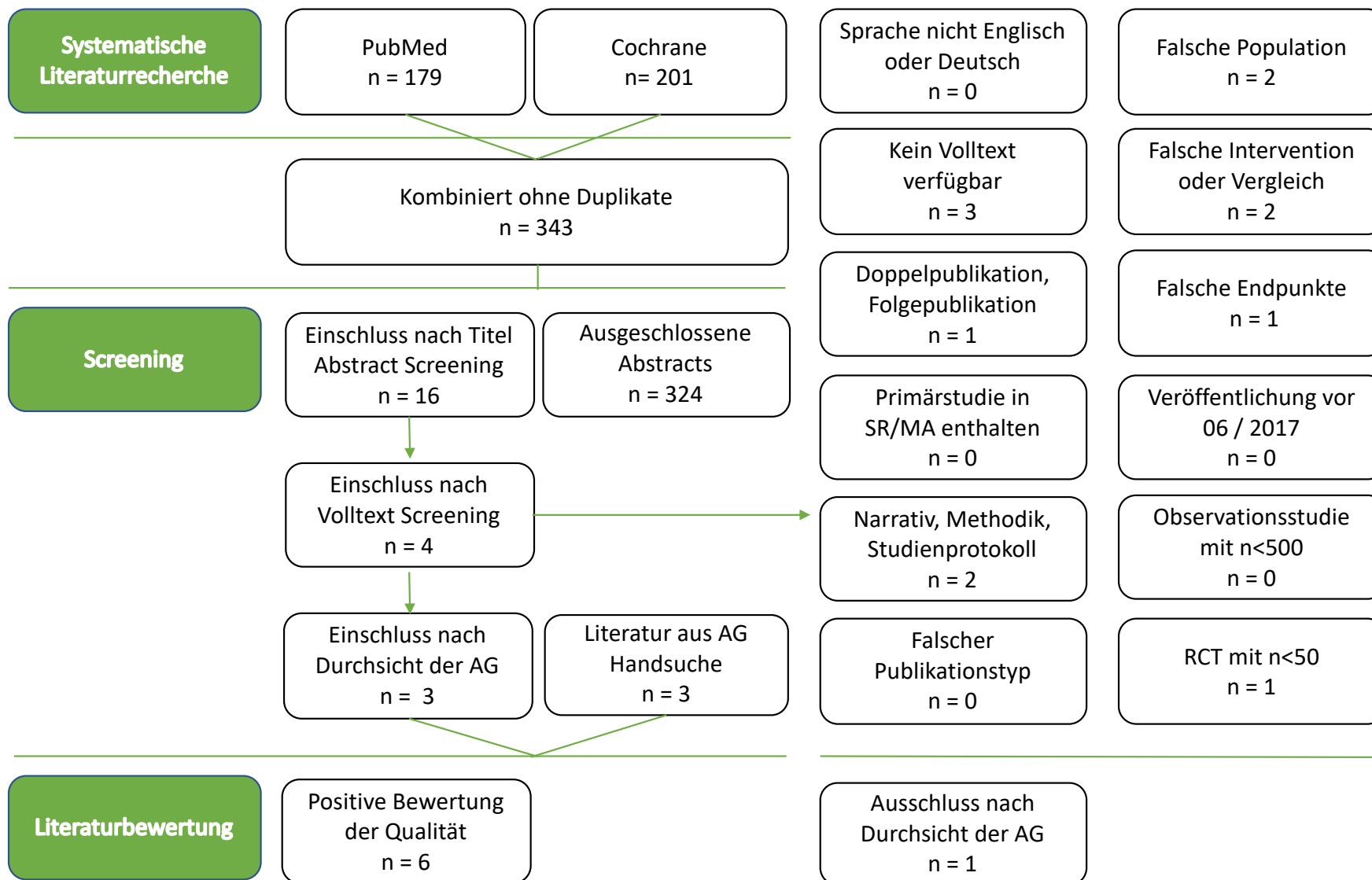
#14	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.461
#15	#13 OR #14	1.509.833
#16	animals[mh] NOT humans[mh]	4.612.039
#17	#15 NOT #16	1.482.952
#18	#12 AND #17	1.553
#19	#18 Publication date from 2017/06 to 2019/09;English, German	179

Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	MeSH descriptor: [Palliative Medicine] explode all trees	2
#11	palliat* or metastatic:ti,ab,kw	31432
#12	#10 or #11	31432
#13	chemotherapy or capecitabin* or catumaxomab or cetuximab or cisplatin or docetaxel or doxorubicin or epirubicin or epirubicin or etoposid* or fluoropyrimidin* or fluorouracil or irinotecan or leucovorin or methotrexat* or mitomycin or oxaliplatin or S-1 or trastuzumab:ti,ab,kw	103568
#14	#12 and #13	16524
#15	#9 and #14 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	201

Eingeschlossene Literatur:

PICO 19 Palliative Therapie – Indikation



3.2 Definition einer multidisziplinären Therapie in der Palliation

PICO 20 Definition einer multidisziplinären Therapie in der Palliation	
Population:	Patienten im Stadium IV und mit lokoregionär fortgeschrittenen, primär inoperablen Plattenepithel- und Adenokarzinomen des Ösophagus und Adenokarzinomen des gastroösophagealen Übergangs 1-3
Interventions:	1) palliative Chemo-therapie 2) Zweitlinienchemotherapie palliativ 3) Radiotherapie palliativ 4) Brachytherapie palliativ 5) Radiochemotherapie palliativ 6) Stentimplantation palliativ 7) Palliative OP multidisziplinär
Comparison:	Die jeweils anderen Verfahren
Outcomes:	Lebensqualität (QoL), Nutzen, Schaden (Therapie Nebenwirkungen/Toxizität), Perforation, Blutung, Todesfall), Remissionsrate, Progressionsfreies Überleben, Symptomfreies Überleben (symptomfree survival) (time without signs and symptoms) Gesamtüberlebensrate/Überlebenszeit Speziell für 6) Stentimplantation zusätzlich: Dysphagiefreies Überleben ohne Stentverschluss, Dysphagieminderung

Suche in PubMed (27.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.243.006
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.217
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.531
#4	#1 OR #2 OR #3	4.060.138
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.507
#6	Cardia[MeSH] OR cardia[tiab]	8.529
#7	#5 OR #6	189.411
#8	#4 AND #7	79.960
#9	chemotherapy[tiab] OR capecitabin*[tiab] OR catumaxomab[tiab] OR cetuximab[tiab] OR cisplatin[tiab] OR docetaxel[tiab] OR doxorubicin[tiab] OR epirubicin[tiab] OR epirubicin*[tiab] OR etoposid*[tiab] OR fluoropyrimidin*[tiab] OR fluorouracil[tiab] OR irinotecan[tiab] OR leucovorin[tiab] OR methotrexat*[tiab] OR mitomycin[tiab] OR oxaliplatin[tiab] OR S-1[tiab] OR trastuzumab[tiab]	537.387
#10	"Radiotherapy"[Mesh] OR radiotherapy[tiab] OR "radiation therapy"[tiab]	311.382
#11	"Brachytherapy"[Mesh] OR brachytherapy[tiab]	24.119
#12	"Chemoradiotherapy"[Mesh] OR chemoradiotherapy[tiab] OR chemoradiation[tiab] OR radiochemotherapy[tiab]	29.074
#13	"Stents"[Mesh] OR stent*[tiab] OR "Prostheses and Implants"[Mesh] OR prothes*[tiab]	33.173
#14	surgery[tiab] OR surgical[tiab] OR resection[tiab] OR operation[tiab] OR bypass[tiab] OR "Kirschner operation"[tiab] OR oesophagectomy[tiab] OR esophagectomy[tiab] OR "Esophagectomy"[Mesh]	2.090.710

#15	"Combined Modality Therapy"[Mesh] OR "combined modality therap*" [tiab] OR "multidisciplinary treatment"[tiab] OR "joint review"[tiab] OR "multidisciplinary meeting"[tiab] OR "multimodal therapy"[tiab] OR "active holistic care"[tiab] OR "specialist palliative care team"[tiab] OR "multidisciplinary team"[tiab] OR "holistic support"[tiab] OR "complementary techniques"[tiab]	270.296
#16	"folic acid"[tiab] OR "non-surgical treatment"[tiab] OR "invasive intervention"[tiab] OR "invasive treatment"[tiab] OR "thermal ablative therapy"[tiab] OR laser[tiab] OR Nd:YAG[tiab] OR dilatation[tiab] OR "light dosimetry"[tiab] OR "porfimer sodium"[tiab] OR "thermal ablation"[tiab] OR argon[tiab] OR "endoluminal intubation"[tiab] OR "early tube technique"[tiab]	324.016
#17	#9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16	3.449.221
#18	palliat*[tiab] OR advanced[tiab] OR metastatic[tiab] OR "Palliative Medicine"[Mesh]	633.615
#19	#17 AND #18	241.822
#20	#8 AND #19	10.034
#21	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183682
#22	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.461
#23	#21 OR #22	1.509.833
#24	animals[mh] NOT humans[mh]	4.612.039
#25	#23 NOT #24	1.482.952
#26	#20 AND #25	2.194
#27	#26 Publication date from 2017/06 to 2019/09;English, German	239

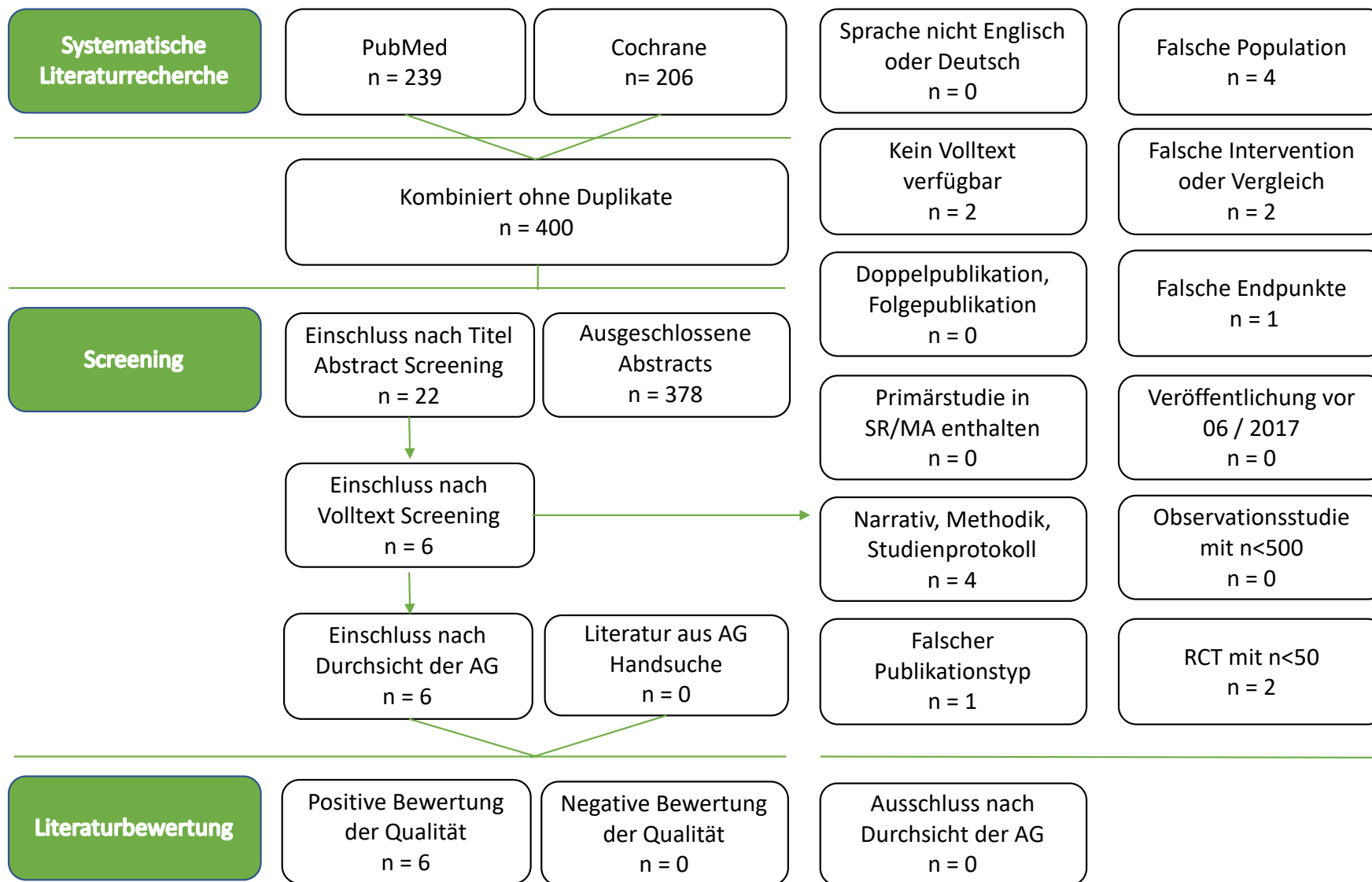
Recherche in der Cochrane Library (28.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211855
#3	#1 or #2	217305

#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	MeSH descriptor: [Palliative Medicine] explode all trees	2
#11	palliat* or metastatic:ti,ab,kw	31432
#12	#10 or #11	31432
#13	chemotherapy or capecitabin* or catumaxomab or cetuximab or cisplatin or docetaxel or doxorubicin or epirubicin or epirubicin* or etoposid* or fluoropyrimidin* or fluorouracil or irinotecan or leucovorin or methotrexat* or mitomycin or oxaliplatin or S-1 or trastuzumab:ti,ab,kw	103579
#14	MeSH descriptor: [Radiotherapy] explode all trees	5919
#15	radiotherapy or "radiation therapy":ti,ab,kw	34667
#16	MeSH descriptor: [Brachytherapy] explode all trees	669
#17	brachytherapy:ti,ab,kw	1990
#18	MeSH descriptor: [Chemoradiotherapy] explode all trees	768
#19	chemoradiotherapy or chemoradiation or radiochemotherapy:ti,ab,kw	7223
#20	MeSH descriptor: [Stents] explode all trees	3975
#21	stent* or prosthes*:ti,ab,kw	25893
#22	MeSH descriptor: [Prostheses and Implants] explode all trees	16477
#23	surgery or surgical or resection or operation or bypass or "Kirschner operation" or oesophagectomy or esophagectomy:ti,ab,kw	260250
#24	MeSH descriptor: [Esophagectomy] explode all trees	347
#25	combined modality therap* or "multidisciplinary treatment" or "joint review" or "multidisciplinary meeting" or "multimodal therapy" or "active holistic care" or "specialist palliative care team" or "multidisciplinary team" or "holistic support" or "complementary techniques":ti,ab,kw	1992
#26	MeSH descriptor: [Combined Modality Therapy] explode all trees	20580
#27	folinic acid or "non-surgical treatment" or "invasive intervention" or "invasive treatment" or "thermal ablative therapy" or laser or (Nd and YAG) or dilatation or "light dosimetry" or "porfimer sodium" or "thermal ablation" or argon or "endoluminal intubation" or "early tube technique":ti,ab,kw	27417
#28	#13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27	388371
#29	#12 and #28	21212
#30	#9 and 29 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	206

Eingeschlossene Literatur:
(46, 48, 52-55)

PICO 20 Palliative Therapie – Definition



3.3 Radiotherapie, Brachytherapie, Radiochemotherapie, Operation und multidisziplinäre Therapie in der Palliation

PICO 21 Radiotherapie, Brachytherapie, Radiochemotherapie, Operation und multidisziplinäre Therapie in der Palliation
Population: Patienten im Stadium IV und mit lokoregionär fortgeschrittenen, primär inoperablen Plattenepithel- und Adenokarzinomen des Ösophagus und Adenokarzinomen des gastroösophagealen Übergangs 1-3
Interventions: 1) Radiotherapie palliativ 2) Brachytherapie palliativ 3) Radiochemotherapie palliativ 4) Stentimplantation palliativ 4) Palliative OP multidisziplinär
Comparison: Die jeweils anderen Verfahren
Outcomes: Lebensqualität (QoL), Nutzen, Schaden (Therapie Nebenwirkungen/Toxizität), Perforation, Blutung, Todesfall), Remissionsrate, Progressionsfreies Überleben, Symptomfreies Überleben (symptomfree survival) (time without signs and symptoms) Gesamtüberlebensrate/Überlebenszeit Speziell für 6) Stentimplantation zusätzlich: Dysphagiefreies Überleben ohne Stentverschluß, Dysphagieminderung

Recherche in PubMed (27.08.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.243.006
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	790.217
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.643.531
#4	#1 OR #2 OR #3	4.060.138
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	185.507
#6	Cardia[MeSH] OR cardia[tiab]	8.529
#7	#5 OR #6	189.411
#8	#4 AND #7	79.960
#9	"Radiotherapy"[Mesh] OR radiotherapy[tiab] OR "radiation therapy"[tiab]	311.382
#10	"Brachytherapy"[Mesh] OR brachytherapy[tiab]	24.119
#11	"Chemoradiotherapy"[Mesh] OR chemoradiotherapy[tiab] OR chemoradiation[tiab] OR radiochemotherapy[tiab]	33.173
#12	surgery[tiab] OR surgical[tiab] OR resection[tiab] OR operation[tiab] OR bypass[tiab] OR "Kirschner operation"[tiab] OR oesophagectomy[tiab] OR esophagectomy[tiab] OR "Esophagectomy"[Mesh]	2.090.710
#13	"Combined Modality Therapy"[Mesh] OR "combined modality therap*" [tiab] OR "multidisciplinary treatment"[tiab] OR "joint review"[tiab] OR "multidisciplinary meeting"[tiab] OR "multimodal therapy"[tiab] OR "active holistic care"[tiab] OR "specialist palliative care team"[tiab] OR "multidisciplinary team"[tiab] OR "holistic support"[tiab] OR "complementary techniques"[tiab]	270.296

#14	#9 OR #10 OR #11 OR #12 OR #13	2.451.135
#15	palliat*[tiab] OR advanced[tiab] OR metastatic[tiab] OR "Palliative Medicine"[Mesh]	633.615
#16	#14 AND #15	172.048
#17	#8 AND #16	8.116
#18	"meta-analysis as topic"[MeSH:noexp] OR Meta-Analysis[ptyp] OR metaanaly*[tiab] OR meta-analy*[tiab]	183682
#19	"Clinical Trial" [PT:NoExp] OR "clinical trial, phase i"[pt] OR "clinical trial, phase ii"[pt] OR "clinical trial, phase iii"[pt] OR "clinical trial, phase iv"[pt] OR "controlled clinical trial"[pt] OR "multicenter study"[pt] OR "randomized controlled trial"[pt] OR "Clinical Trials as Topic"[mesh:noexp] OR "clinical trials, phase i as topic"[MeSH Terms:noexp] OR "clinical trials, phase ii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iii as topic"[MeSH Terms:noexp] OR "clinical trials, phase iv as topic"[MeSH Terms:noexp] OR "controlled clinical trials as topic"[MeSH Terms:noexp] OR "randomized controlled trials as topic"[MeSH Terms:noexp] OR "early termination of clinical trials"[MeSH Terms:noexp] OR "multicenter studies as topic"[MeSH Terms:noexp] OR "Double-Blind Method"[Mesh] OR ((randomised[tiab] OR randomized[tiab]) AND (trial[tiab] OR trials[tiab])) OR ((single[tiab] OR double[tiab] OR doubled[tiab] OR triple[tiab] OR tripled[tiab] OR treble[tiab] OR treble[tiab]) AND (blind*[tiab] OR mask*[tiab])) OR ("4 arm"[tiab] OR "four arm"[tiab])	1.396.461
#20	#18 OR #19	1.509.833
#21	animals[mh] NOT humans[mh]	4.612.039
#22	#20 NOT #21	1.482.952
#23	#17 AND #22	1.558
#24	#23 Publication date from 2017/06 to 2019/09;English, German	148

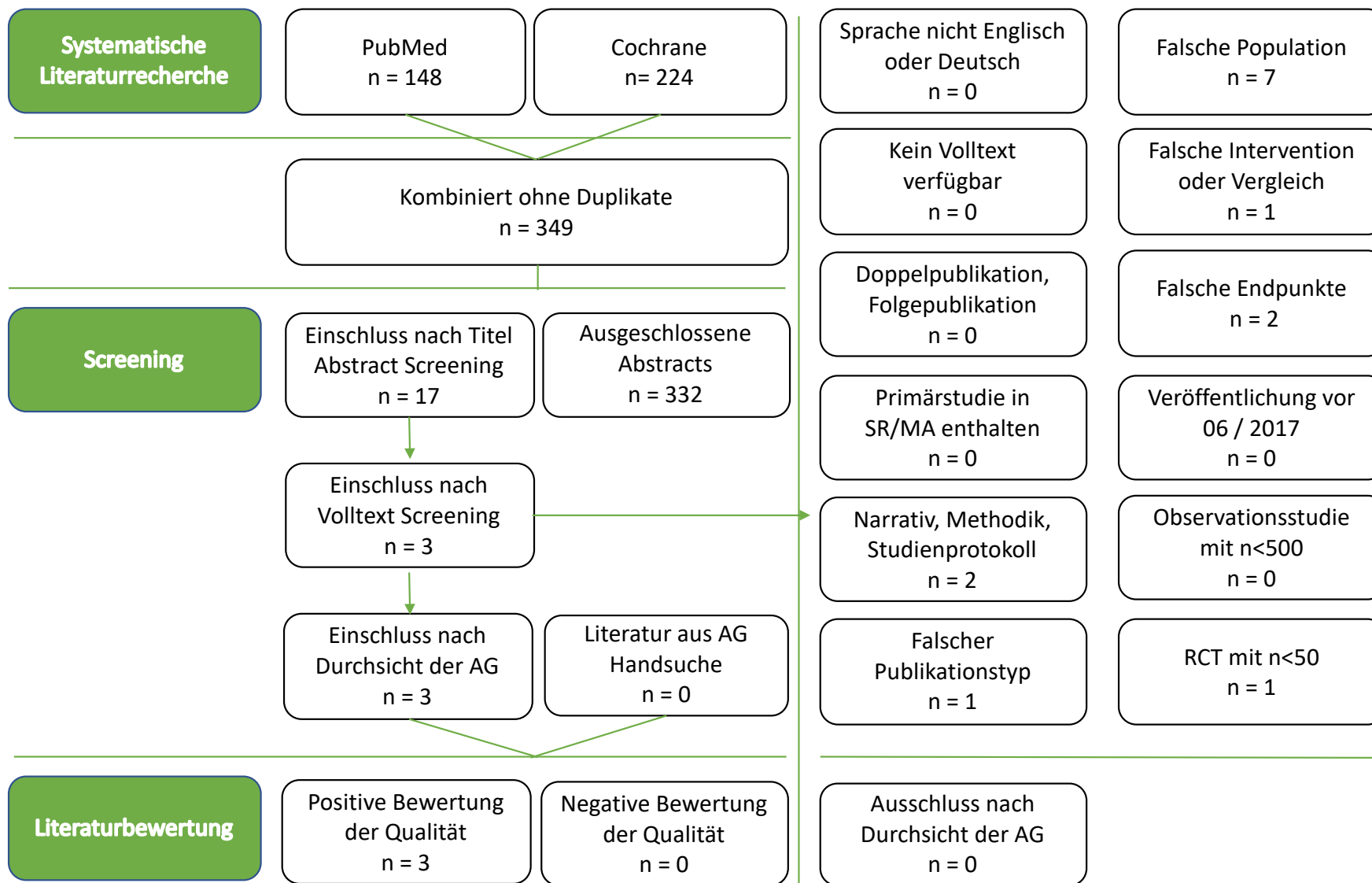
Recherche in der Cochrane Library (29.08.19)

ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	70956
#2	Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour:ti,ab,kw	211856
#3	#1 or #2	217306
#4	MeSH descriptor: [Esophagus] explode all trees	1258
#5	esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*:ti,ab,kw	18527
#6	MeSH descriptor: [Cardia] explode all trees	53
#7	cardia:ti,ab,kw	408
#8	#4 or #5 or #6 or #7	18685
#9	#3 and #8	7348
#10	MeSH descriptor: [Palliative Medicine] explode all trees	2
#11	palliat* or advanced or metastatic:ti,ab,kw	75299
#12	#10 or #11	75299
#13	radiotherapy or "radiation therapy":ti,ab,kw	34667

#14	MeSH descriptor: [Radiotherapy] explode all trees	5919
#15	brachytherapy:ti,ab,kw	1990
#16	MeSH descriptor: [Brachytherapy] explode all trees	669
#17	chemoradiotherapy or chemoradiation or radiochemotherapy:ti,ab,kw	7223
#18	MeSH descriptor: [Chemoradiotherapy] explode all trees	768
#19	surgery or surgical or resection or operation or bypass or "Kirschner operation" or oesophagectomy or esophagectomy:ti,ab,kw	260250
#20	MeSH descriptor: [Esophagectomy] explode all trees	347
#21	combined modality therap* or "multidisciplinary treatment" or "joint review" or "multidisciplinary meeting" or "multimodal therapy" or "active holistic care" or "specialist palliative care team" or "multidisciplinary team" or "holistic support" or "complementary techniques":ti,ab,kw	1992
#22	MeSH descriptor: [Combined Modality Therapy] explode all trees	20580
#23	#13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22	294021
#24	#12 and #23	24531
#25	#9 and 24	1352
#26	chemotherapy or capecitabin* or catumaxomab or cetuximab or cisplatin or docetaxel or doxorubicin or epirubicin or epirubicin* or etoposid* or fluoropyrimidin* or fluorouracil or irinotecan or leucovorin or methotrexat* or mitomycin or oxaliplatin or S-1 or trastuzumab:ti,ab,kw	103582
#27	#12 and #26	34200
#28	#9 and #27	1776
#29	#25 not #28 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	224

Eingeschlossene Literatur:
(48, 53, 54)

PICO 21 Palliative Therapie – Radiotherapie



4. Zusätzliche Recherche: Stent und Radiotherapie in der palliativen Behandlung von Ösophaguskarzinomen

PICO 22 Ist Stentimplantation der Radiotherapie in der palliativen Behandlung des Ösophaguskarzinoms vorzuziehen?

Patienten im Stadium IV und mit lokoregionär fortgeschrittenen, primär inoperablen Plattenepithel- und Adenokarzinomen des Ösophagus und Adenokarzinomen des gastroösophagealen Übergangs 1-3

Intervention: Stentimplantation palliativ

Comparison: Radiotherapie palliativ

Outcomes: Lebensqualität (QoL), Nutzen, Schaden

(Therapienebenwirkungen/Toxizität), Perforation, Blutung, Todesfall),
Remissionsrate, Progressionsfreies Überleben, Symptomfreies Überleben (symptomfree survival) (time without signs and symptoms)

Gesamtüberlebensrate/Überlebenszeit Speziell für 6) Stentimplantation zusätzlich:
Dysphagiefreies Überleben ohne Stentverschluß, Dysphagieminderung

Recherche in PubMed (29.10.19)

Nr.	Query	Treffer
#1	Neoplasms[MeSH] OR neoplasm*[tiab]	3.265.938
#2	carcinom*[tiab] OR adenocarcinom*[tiab] OR adeno-carcinom*[tiab] OR adenom*[tiab]	796.771
#3	malignan*[tiab] OR cancer[tiab] OR tumor[tiab] OR tumour[tiab]	2.670.273
#4	#1 OR #2 OR #3	4.093.534
#5	Esophagus[MeSH] OR esophag*[tiab] OR oesophag*[tiab] OR gastro-esophag*[tiab] OR gastroesophag*[tiab] OR gastro-oesophag*[tiab] OR gastrooesophag*[tiab]	186.786
#6	Cardia[MeSH] OR cardia[tiab]	8.566
#7	#5 OR #6	190.717
#8	#4 AND #7	80.658
#9	"Radiotherapy"[Mesh] OR radiotherapy[tiab] OR "radiation therapy"[tiab] OR Radiotherapies[tiab] OR Radiation Therapy[tiab] OR Radiation Therapies[tiab] OR Therapies, Radiation[tiab] OR Therapy, Radiation[tiab] OR Radiation Treatment[tiab] OR Radiation Treatments[tiab] OR Treatment, Radiation[tiab] OR Radiotherapy, Targeted[tiab] OR Radiotherapies, Targeted[tiab] OR Targeted Radiotherapies[tiab] OR Targeted Radiotherapy[tiab] OR Targeted Radiation Therapy[tiab] OR Radiation Therapies, Targeted[tiab] OR Targeted Radiation Therapies[tiab] OR Therapies, Targeted[tiab] OR Radiation[tiab] OR Therapy, Targeted Radiation[tiab] OR Radiation Therapy, Targeted[tiab]	629.638
#10	palliat*[tiab] OR advanced[tiab] OR metastatic[tiab] OR "Palliative Medicine"[Mesh]	641.215

#11	Stents[Mesh] OR stent*[tiab]	111.251
#12	#9 AND #10 AND #11	732
#13	#8 AND #16	264
#14	animals[mh] NOT humans[mh]	4.612.039
#15	#13 NOT #14	263
#16	#15 Publication date from 2017/06 to 2019/09; English, German	136

Recherche in der Cochrane Library (29.10.19)*

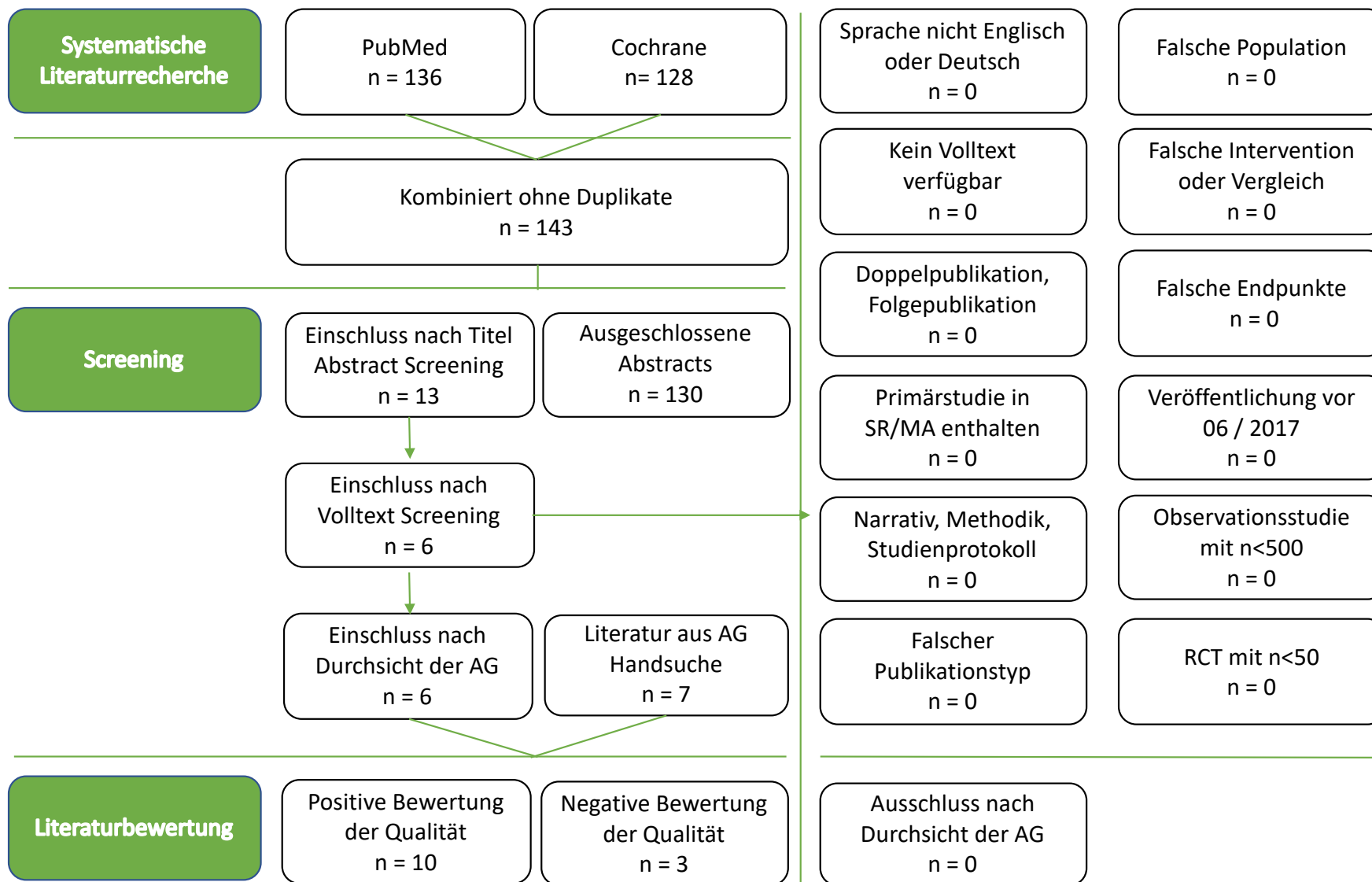
ID	Search	Hits
#1	MeSH descriptor: [Neoplasms] explode all trees	79238
#2	(Neoplasm* or carcinom* or adenocarcinom* or adeno-carcinom* or adenom* or malignan* or cancer or tumor or tumour):ti,ab,kw	213938
#3	#1 OR #2	223024
#4	MeSH descriptor: [Esophagus] explode all trees	1302
#5	(esophag* or oesophag* or gastro-esophag* or gastro-oesophag* or gastroesophag*):ti,ab,kw	19537
#6	MeSH descriptor: [Cardia] explode all trees	52
#7	cardia:ti,ab,kw	431
#8	#4 OR #5 OR #6 OR #7	19701
#9	#3 AND #8	7732
#10	MeSH descriptor: [Palliative Medicine] explode all trees	2
#11	(palliat* or advanced or metastatic):ti,ab,kw	76953
#12	#10 OR #11	76953
#13	(radiotherap* OR radiation OR "radiation therapy"):ti,ab,kw	46456
#14	MeSH descriptor: [Radiotherapy] explode all trees	6086
#15	#13 OR #14	46793
#16	(Stent*):ti,ab,kw	15699
#17	MeSH descriptor: [Stents] explode all trees	4190
#18	#16 OR #17	15699
#19	#9 AND #12 AND #15 AND #18	58
#20	#19 with Publication Year from 2017 to 2019, with Cochrane Library publication date Between Jun 2017 and Sep 2019	6

*Cochrane Recherche wurde am 24.11.2020 wegen Schreibfehler aktualisiert. Hier ist das aktuelle Ergebnis dargestellt. Das Screening wurde entsprechend des dargestellten PRISMA Schemas durchgeführt.

Addendum zur Recherche wird im Methodenreport ausführlicher besprochen. Die identifizierten tatsächlich relevanten Studien sind in den Studien des PRISMA Schemas enthalten oder wurden durch die Koordination separat geprüft.

Eingeschlossene Literatur:
(56-65)

PICO 22 Palliative Therapie – Stent und Radiotherapie



5. Literaturverzeichnis

1. de Gouw D, Klarenbeek BR, Driessen M, Bouwense SAW, van Workum F, Futterer JJ, et al. Detecting Pathological Complete Response in Esophageal Cancer after Neoadjuvant Therapy Based on Imaging Techniques: A Diagnostic Systematic Review and Meta-Analysis. *J Thorac Oncol*. 2019;14(7):1156-71.
2. Eyck BM, Onstenk BD, Noordman BJ, Nieboer D, Spaander MCW, Valkema R, et al. Accuracy of Detecting Residual Disease After Neoadjuvant Chemoradiotherapy for Esophageal Cancer: A Systematic Review and Meta-analysis. *Ann Surg*. 2020;271(2):245-56.
3. Qumseya BJ, Bartel MJ, Gendy S, Bain P, Qumseya A, Wolfsen H. High rate of over-staging of Barrett's neoplasia with endoscopic ultrasound: Systemic review and meta-analysis. *Dig Liver Dis*. 2018;50(5):438-45.
4. Hu J, Zhu D, Yang Y. Diagnostic value of 18F-fluorodeoxyglucose positron-emission tomography/computed tomography for preoperative lymph node metastasis of esophageal cancer: A meta-analysis. *Medicine (Baltimore)*. 2018;97(50):e13722.
5. Jiang C, Chen Y, Zhu Y, Xu Y. Systematic review and meta-analysis of the accuracy of 18F-FDG PET/CT for detection of regional lymph node metastasis in esophageal squamous cell carcinoma. *J Thorac Dis*. 2018;10(11):6066-76.
6. Kroese TE, Goense L, van Hillegersberg R, de Keizer B, Mook S, Ruurda JP, et al. Detection of distant interval metastases after neoadjuvant therapy for esophageal cancer with 18F-FDG PET(/CT): a systematic review and meta-analysis. *Dis Esophagus*. 2018;31(12).
7. Noordman BJ, Spaander MCW, Valkema R, Wijnhoven BPL, van Berge Henegouwen MI, Shapiro J, et al. Detection of residual disease after neoadjuvant chemoradiotherapy for oesophageal cancer (preSANO): a prospective multicentre, diagnostic cohort study. *Lancet Oncol*. 2018;19(7):965-74.
8. de Matos MV, da Ponte-Neto AM, de Moura DTH, Maahs ED, Chaves DM, Baba ER, et al. Treatment of high-grade dysplasia and intramucosal carcinoma using radiofrequency ablation or endoscopic mucosal resection + radiofrequency ablation: Meta-analysis and systematic review. *World J Gastrointest Endosc*. 2019;11(3):239-48.
9. Pandey G, Mulla M, Lewis WG, Foliaki A, Chan DSY. Systematic review and meta-analysis of the effectiveness of radiofrequency ablation in low grade dysplastic Barrett's esophagus. *Endoscopy*. 2018;50(10):953-60.
10. Yang D, Zou F, Xiong S, Forde JJ, Wang Y, Draganov PV. Endoscopic submucosal dissection for early Barrett's neoplasia: a meta-analysis. *Gastrointest Endosc*. 2018;87(6):1383-93.
11. Alderson D, Cunningham D, Nankivell M, Blazeby JM, Griffin SM, Crellin A, et al. Neoadjuvant cisplatin and fluorouracil versus epirubicin, cisplatin, and capecitabine followed by resection in patients with oesophageal adenocarcinoma (UK MRC OE05): an open-label, randomised phase 3 trial. *Lancet Oncol*. 2017;18(9):1249-60.
12. Anderegg MCJ, van der Sluis PC, Ruurda JP, Gisbertz SS, Hulshof M, van Vulpen M, et al. Preoperative Chemoradiotherapy Versus Perioperative Chemotherapy for Patients With Resectable Esophageal or Gastroesophageal Junction Adenocarcinoma. *Ann Surg Oncol*. 2017;24(8):2282-90.
13. Deng J, Su Q, Ren Z, Wen J, Xue Z, Zhang L, et al. Comparison of short-term outcomes between minimally invasive McKeown and Ivor Lewis esophagectomy for esophageal or junctional cancer: a systematic review and meta-analysis. *Onco Targets Ther*. 2018;11:6057-69.
14. Gooszen JAH, Goense L, Gisbertz SS, Ruurda JP, van Hillegersberg R, van Berge Henegouwen MI. Intrathoracic versus cervical anastomosis and predictors of anastomotic leakage after oesophagectomy for cancer. *Br J Surg*. 2018;105(5):552-60.

15. Gottlieb-Vedi E, Kauppila JH, Malietzis G, Nilsson M, Markar SR, Lagergren J. Long-term Survival in Esophageal Cancer After Minimally Invasive Compared to Open Esophagectomy: A Systematic Review and Meta-analysis. *Ann Surg.* 2019;270(6):1005-17.
16. Hayata K, Nakamori M, Nakamura M, Ojima T, Iwahashi M, Katsuda M, et al. Circular stapling versus triangulating stapling for the cervical esophagogastric anastomosis after esophagectomy in patients with thoracic esophageal cancer: A prospective, randomized, controlled trial. *Surgery.* 2017;162(1):131-8.
17. Mariette C, Markar SR, Dabakuyo-Yonli TS, Meunier B, Pezet D, Collet D, et al. Hybrid Minimally Invasive Esophagectomy for Esophageal Cancer. *N Engl J Med.* 2019;380(2):152-62.
18. Seesing MFJ, Gisbertz SS, Goense L, van Hillegersberg R, Kroon HM, Lagarde SM, et al. A Propensity Score Matched Analysis of Open Versus Minimally Invasive Transthoracic Esophagectomy in the Netherlands. *Ann Surg.* 2017;266(5):839-46.
19. Straatman J, van der Wielen N, Cuesta MA, Daams F, Roig Garcia J, Bonavina L, et al. Minimally Invasive Versus Open Esophageal Resection: Three-year Follow-up of the Previously Reported Randomized Controlled Trial: the TIME Trial. *Ann Surg.* 2017;266(2):232-6.
20. van der Sluis PC, van der Horst S, May AM, Schippers C, Brosens LAA, Joore HCA, et al. Robot-assisted Minimally Invasive Thoracoscopic Esophagectomy Versus Open Transthoracic Esophagectomy for Resectable Esophageal Cancer: A Randomized Controlled Trial. *Ann Surg.* 2019;269(4):621-30.
21. Kurokawa Y, Takeuchi H, Doki Y, Mine S, Terashima M, Yasuda T, et al. Mapping of Lymph Node Metastasis From Esophagogastric Junction Tumors: A Prospective Nationwide Multicenter Study. *Ann Surg.* 2019.
22. Li B, Hu H, Zhang Y, Zhang J, Miao L, Ma L, et al. Extended Right Thoracic Approach Compared With Limited Left Thoracic Approach for Patients With Middle and Lower Esophageal Squamous Cell Carcinoma: Three-year Survival of a Prospective, Randomized, Open-label Trial. *Ann Surg.* 2018;267(5):826-32.
23. Visser E, Markar SR, Ruurda JP, Hanna GB, van Hillegersberg R. Prognostic Value of Lymph Node Yield on Overall Survival in Esophageal Cancer Patients: A Systematic Review and Meta-analysis. *Ann Surg.* 2019;269(2):261-8.
24. Yamashita H, Seto Y, Sano T, Makuuchi H, Ando N, Sasako M. Results of a nationwide retrospective study of lymphadenectomy for esophagogastric junction carcinoma. *Gastric Cancer.* 2017;20(Suppl 1):69-83.
25. Fuchs CS, Niedzwiecki D, Mamon HJ, Tepper JE, Ye X, Swanson RS, et al. Adjuvant Chemoradiotherapy With Epirubicin, Cisplatin, and Fluorouracil Compared With Adjuvant Chemoradiotherapy With Fluorouracil and Leucovorin After Curative Resection of Gastric Cancer: Results From CALGB 80101 (Alliance). *J Clin Oncol.* 2017;35(32):3671-7.
26. Kang J, Chang JY, Sun X, Men Y, Zeng H, Hui Z. Role of Postoperative Concurrent Chemoradiotherapy for Esophageal Carcinoma: A meta-analysis of 2165 Patients. *J Cancer.* 2018;9(3):584-93.
27. Li F, Ding N, Zhao Y, Yuan L, Mao Y. The current optimal multimodality treatments for oesophageal squamous-cell carcinoma: A systematic review and meta-analysis. *Int J Surg.* 2018;60:88-100.
28. Liu T, Liu W, Zhang H, Ren C, Chen J, Dang J. The role of postoperative radiotherapy for radically resected esophageal squamous cell carcinoma: a systemic review and meta-analysis. *J Thorac Dis.* 2018;10(7):4403-12.
29. Montagnani F, Fornaro L, Frumento P, Vivaldi C, Falcone A, Fioretto L. Multimodality treatment of locally advanced squamous cell carcinoma of the oesophagus: A comprehensive review and network meta-analysis. *Crit Rev Oncol Hematol.* 2017;114:24-32.

30. Zhao P, Yan W, Fu H, Lin Y, Chen KN. Efficacy of postoperative adjuvant chemotherapy for esophageal squamous cell carcinoma: A meta-analysis. *Thorac Cancer*. 2018;9(8):1048-55.
31. Ruhstaller T, Thuss-Patience P, Hayoz S, Schacher S, Knorrenschild JR, Schnider A, et al. Neoadjuvant chemotherapy followed by chemoradiation and surgery with and without cetuximab in patients with resectable esophageal cancer: a randomized, open-label, phase III trial (SAKK 75/08). *Ann Oncol*. 2018;29(6):1386-93.
32. Al-Batran SE, Homann N, Pauligk C, Goetze TO, Meiler J, Kasper S, et al. Perioperative chemotherapy with fluorouracil plus leucovorin, oxaliplatin, and docetaxel versus fluorouracil or capecitabine plus cisplatin and epirubicin for locally advanced, resectable gastric or gastro-oesophageal junction adenocarcinoma (FLOT4): a randomised, phase 2/3 trial. *Lancet*. 2019;393(10184):1948-57.
33. Cai Z, Yin Y, Zhao Z, Xin C, Cai Z, Yin Y, et al. Comparative Effectiveness of Neoadjuvant Treatments for Resectable Gastroesophageal Cancer: A Network Meta-Analysis. *Front Pharmacol*. 2018;9:872.
34. Chan KKW, Saluja R, Delos Santos K, Lien K, Shah K, Cramarossa G, et al. Neoadjuvant treatments for locally advanced, resectable esophageal cancer: A network meta-analysis. *Int J Cancer*. 2018;143(2):430-7.
35. Cheng J, Cai M, Shuai X, Gao J, Wang G, Tao K. Multimodal treatments for resectable esophagogastric junction cancer: a systematic review and network meta-analysis. *Ther Adv Med Oncol*. 2019;11:1758835919838963.
36. Cocolini F, Nardi M, Montori G, Ceresoli M, Celotti A, Cascinu S, et al. Neoadjuvant chemotherapy in advanced gastric and esophago-gastric cancer. Meta-analysis of randomized trials. *Int J Surg*. 2018;51:120-7.
37. Feng H, Zhao Y, Jing T, Ma J, Zhao Y, Zhang J, et al. Traditional and cumulative meta-analysis: Chemoradiotherapy followed by surgery versus surgery alone for resectable esophageal carcinoma. *Mol Clin Oncol*. 2018;8(2):342-51.
38. Meng X, Wang L, Zhao Y, Zhu B, Sun T, Zhang T, et al. Neoadjuvant Chemoradiation Treatment for Resectable Esophago-Gastric Cancer: A Systematic Review and Meta-Analysis. *J Cancer*. 2019;10(1):192-204.
39. Noordman BJ, Verdam MGE, Lagarde SM, Hulshof M, van Hagen P, van Berge Henegouwen MI, et al. Effect of Neoadjuvant Chemoradiotherapy on Health-Related Quality of Life in Esophageal or Junctional Cancer: Results From the Randomized CROSS Trial. *J Clin Oncol*. 2018;36(3):268-75.
40. Noordman BJ, Verdam MGE, Lagarde SM, Shapiro J, Hulshof M, van Berge Henegouwen MI, et al. Impact of neoadjuvant chemoradiotherapy on health-related quality of life in long-term survivors of esophageal or junctional cancer: results from the randomized CROSS trial. *Ann Oncol*. 2018;29(2):445-51.
41. Petrelli F, Ghidini M, Barni S, SgROI G, Passalacqua R, Tomasello G. Neoadjuvant chemoradiotherapy or chemotherapy for gastroesophageal junction adenocarcinoma: A systematic review and meta-analysis. *Gastric Cancer*. 2019;22(2):245-54.
42. Ma MW, Gao XS, Gu XB, Xie M, Cui M, Zhang M, et al. The role of definitive chemoradiotherapy versus surgery as initial treatments for potentially resectable esophageal carcinoma. *World J Surg Oncol*. 2018;16(1):172.
43. Voeten DM, den Bakker CM, Heineman DJ, Ket JCF, Daams F, van der Peet DL. Definitive Chemoradiotherapy Versus Trimodality Therapy for Resectable Oesophageal Carcinoma: Meta-analyses and Systematic Review of Literature. *World J Surg*. 2019;43(5):1271-85.
44. Wang J, Qin J, Jing S, Liu Q, Cheng Y, Wang Y, et al. Clinical complete response after chemoradiotherapy for carcinoma of thoracic esophagus: Is esophagectomy always necessary? A systematic review and meta-analysis. *Thorac Cancer*. 2018;9(12):1638-47.

45. Gabrielson S, Sanchez-Crespo A, Klevebro F, Axelsson R, Albert Tsai J, Johansson O, et al. 18F FDG-PET/CT evaluation of histological response after neoadjuvant treatment in patients with cancer of the esophagus or gastroesophageal junction. *Acta Radiol.* 2019;60(5):578-85.
46. Janmaat VT, Steyerberg EW, van der Gaast A, Mathijssen RH, Bruno MJ, Peppelenbosch MP, et al. Palliative chemotherapy and targeted therapies for esophageal and gastroesophageal junction cancer. *Cochrane Database Syst Rev.* 2017;11:Cd004063.
47. Kato K, Cho BC, Takahashi M, Okada M, Lin CY, Chin K, et al. Nivolumab versus chemotherapy in patients with advanced oesophageal squamous cell carcinoma refractory or intolerant to previous chemotherapy (ATTRACTION-3): a multicentre, randomised, open-label, phase 3 trial. *Lancet Oncol.* 2019;20(11):1506-17.
48. Penniment MG, De Ieso PB, Harvey JA, Stephens S, Au HJ, O'Callaghan CJ, et al. Palliative chemoradiotherapy versus radiotherapy alone for dysphagia in advanced oesophageal cancer: a multicentre randomised controlled trial (TROG 03.01). *Lancet Gastroenterol Hepatol.* 2018;3(2):114-24.
49. Shah MA, Kojima T, Hochhauser D, Enzinger P, Raimbourg J, Hollebecque A, et al. Efficacy and Safety of Pembrolizumab for Heavily Pretreated Patients With Advanced, Metastatic Adenocarcinoma or Squamous Cell Carcinoma of the Esophagus: The Phase 2 KEYNOTE-180 Study. *JAMA Oncol.* 2019;5(4):546-50.
50. Shitara K, Ozguroglu M, Bang YJ, Di Bartolomeo M, Mandala M, Ryu MH, et al. Pembrolizumab versus paclitaxel for previously treated, advanced gastric or gastro-oesophageal junction cancer (KEYNOTE-061): a randomised, open-label, controlled, phase 3 trial. *Lancet.* 2018;392(10142):123-33.
51. van Kleef JJ, Ter Veer E, van den Boorn HG, Schokker S, Ngai LL, Prins MJ, et al. Quality of Life During Palliative Systemic Therapy for Esophagogastric Cancer: Systematic Review and Meta-Analysis. *J Natl Cancer Inst.* 2020;112(1):12-29.
52. Didden P, Reijm AN, Erler NS, Wolters LMM, Tang TJ, Ter Borg PCJ, et al. Fully vs. partially covered selfexpandable metal stent for palliation of malignant esophageal strictures: a randomized trial (the COPAC study). *Endoscopy.* 2018;50(10):961-71.
53. Doosti-Irani A, Mansournia MA, Rahimi-Foroushani A, Haddad P, Holakouie-Naieni K. Complications of stent placement in patients with esophageal cancer: A systematic review and network meta-analysis. *PLoS One.* 2017;12(10):e0184784.
54. Lai A, Lipka S, Kumar A, Sethi S, Bromberg D, Li N, et al. Role of Esophageal Metal Stents Placement and Combination Therapy in Inoperable Esophageal Carcinoma: A Systematic Review and Meta-analysis. *Dig Dis Sci.* 2018;63(4):1025-34.
55. Pandit S, Samant H, Morris J, Alexander SJ. Efficacy and safety of standard and anti-reflux self-expanding metal stent: A systematic review and meta-analysis of randomized controlled trials. *World J Gastrointest Endosc.* 2019;11(4):271-80.
56. Ahmed O, Bolger JC, O'Neill B, Robb WB. Use of esophageal stents to relieve dysphagia during neoadjuvant therapy prior to esophageal resection: a systematic review. *Dis Esophagus.* 2020;33(1).
57. Bakheet N, Hu HT, Park JH, Jeon JY, Yoon SH, Kim KY, et al. Clinical effectiveness and safety of self-expanding metal stent placement following palliative chemotherapy in patients with advanced esophageal cancer. *Abdom Radiol (NY).* 2020;45(2):563-70.
58. Helminen O, Kauppila JH, Kyto V, Gunn J, Lagergren J, Sihvo E. Preoperative esophageal stenting and short-term outcomes of surgery for esophageal cancer in a population-based study from Finland and Sweden. *Dis Esophagus.* 2019;32(11).
59. Jarvinen T, Ilonen I, Ylikoski E, Nelskylä K, Kauppi J, Salo J, et al. Preoperative stenting in oesophageal cancer has no effect on survival: a propensity-matched case-control study. *Eur J Cardiothorac Surg.* 2017;52(2):385-91.

60. Kjaer DW, Nassar M, Jensen LS, Svendsen LB, Mortensen FV. A bridging stent to surgery in patients with esophageal and gastroesophageal junction cancer has a dramatic negative impact on patient survival: A retrospective cohort study through data acquired from a prospectively maintained national database. *Dis Esophagus*. 2017;30(3):1-7.
61. Lancellotta V, Cellini F, Fionda B, De Sanctis V, Vidali C, Fusco V, et al. The role of palliative interventional radiotherapy (brachytherapy) in esophageal cancer: An AIRO (Italian Association of Radiotherapy and Clinical Oncology) systematic review focused on dysphagia-free survival. *Brachytherapy*. 2020;19(1):104-10.
62. Medeiros VS, Martins BC, Lenz L, Ribeiro MSI, de Paulo GA, Lima MS, et al. Adverse events of self-expandable esophageal metallic stents in patients with long-term survival from advanced malignant disease. *Gastrointest Endosc*. 2017;86(2):299-306.
63. Reijm AN, Didden P, Schelling SJC, Siersema PD, Bruno MJ, Spaander MCW. Self-expandable metal stent placement for malignant esophageal strictures - changes in clinical outcomes over time. *Endoscopy*. 2019;51(1):18-29.
64. Sigounas DE, Krystallis C, Couper G, Paterson-Brown S, Tatsioni A, Plevris JN. Argon plasma coagulation compared with stent placement in the palliative treatment of inoperable oesophageal cancer. *United European Gastroenterol J*. 2017;5(1):21-31.
65. Wlodarczyk JR, Kuzdzal J. Stenting in Palliation of Unresectable Esophageal Cancer. *World J Surg*. 2018;42(12):3988-96.