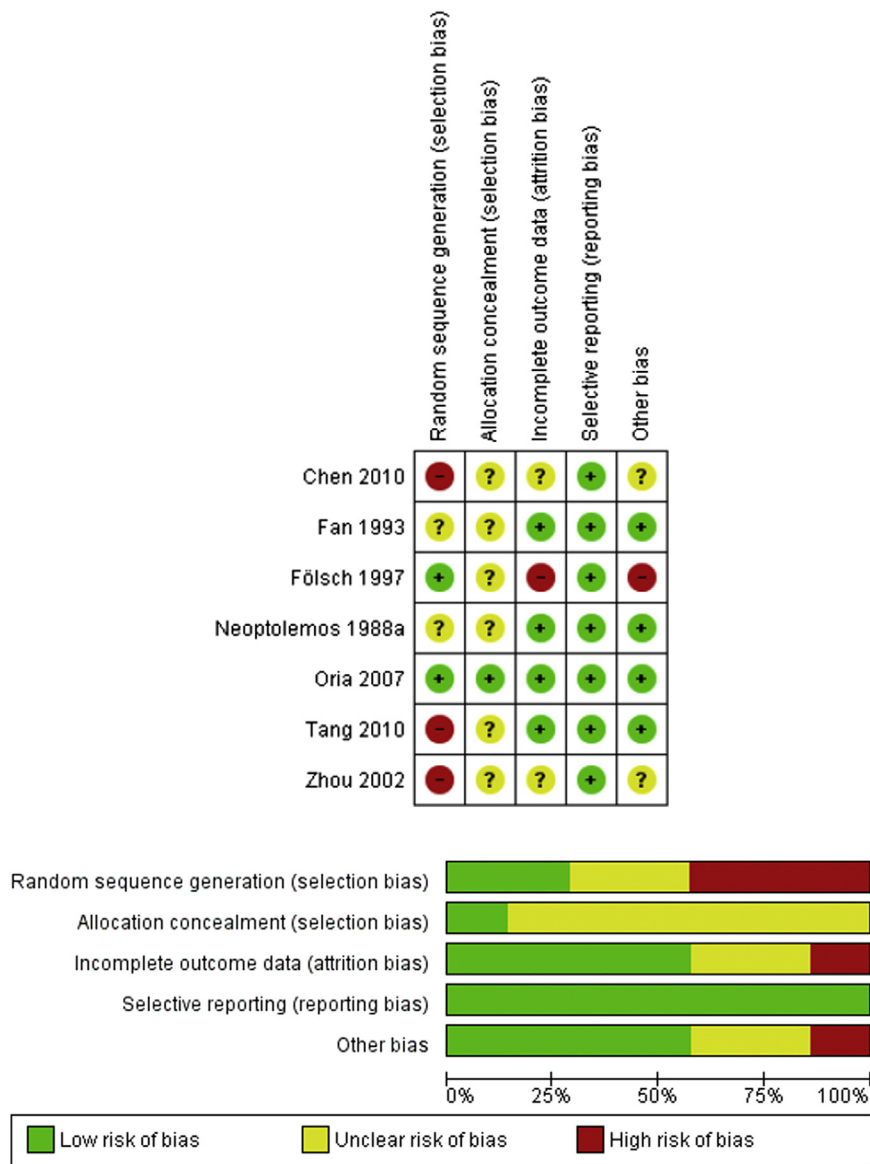
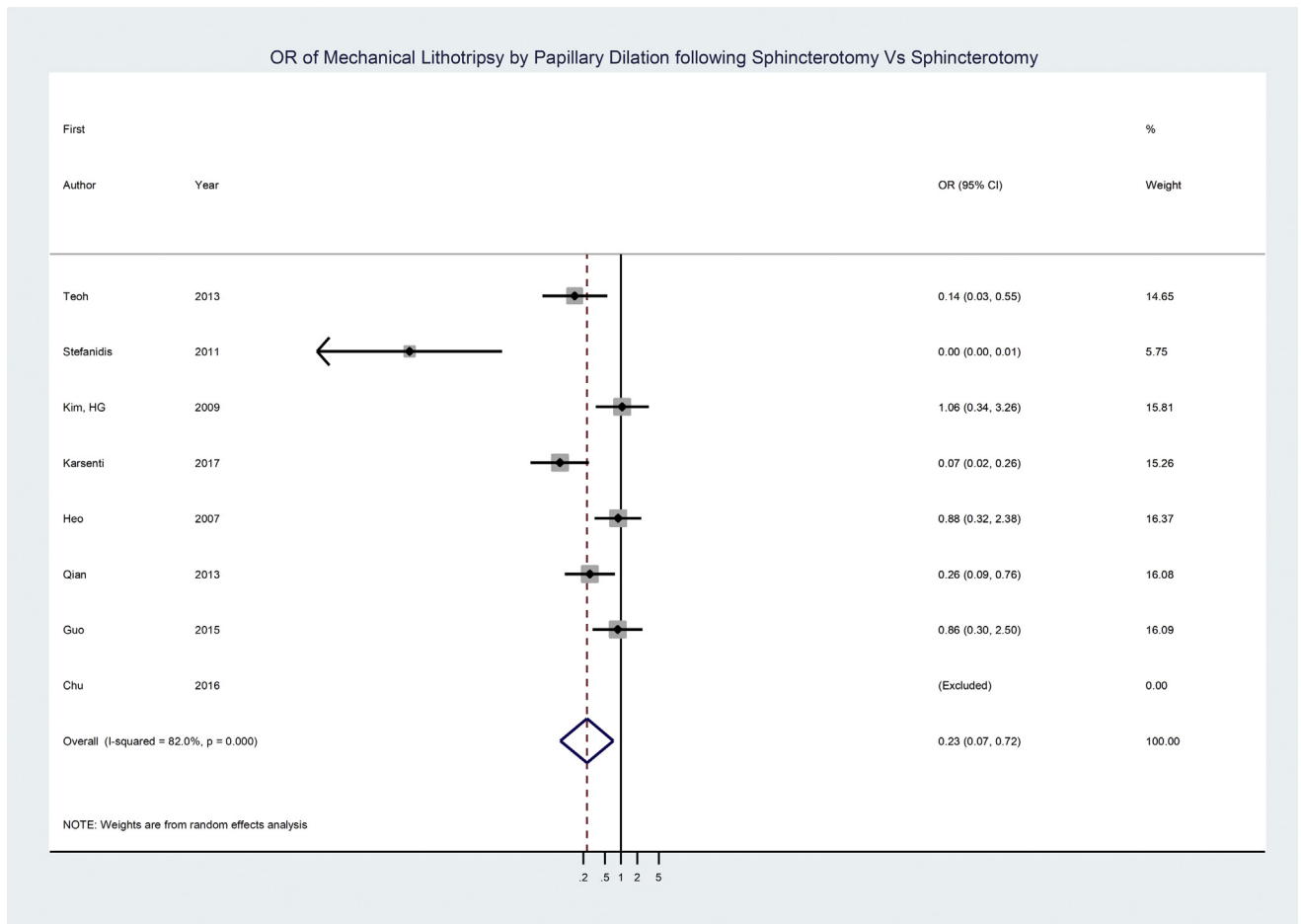


Supplementary Figure 1. Quality parameters of studies comparing EUS versus MRCP for confirmation of choledocholithiasis. (Adapted from Meeralam et al,²⁵ Fig. 2, with permission.)

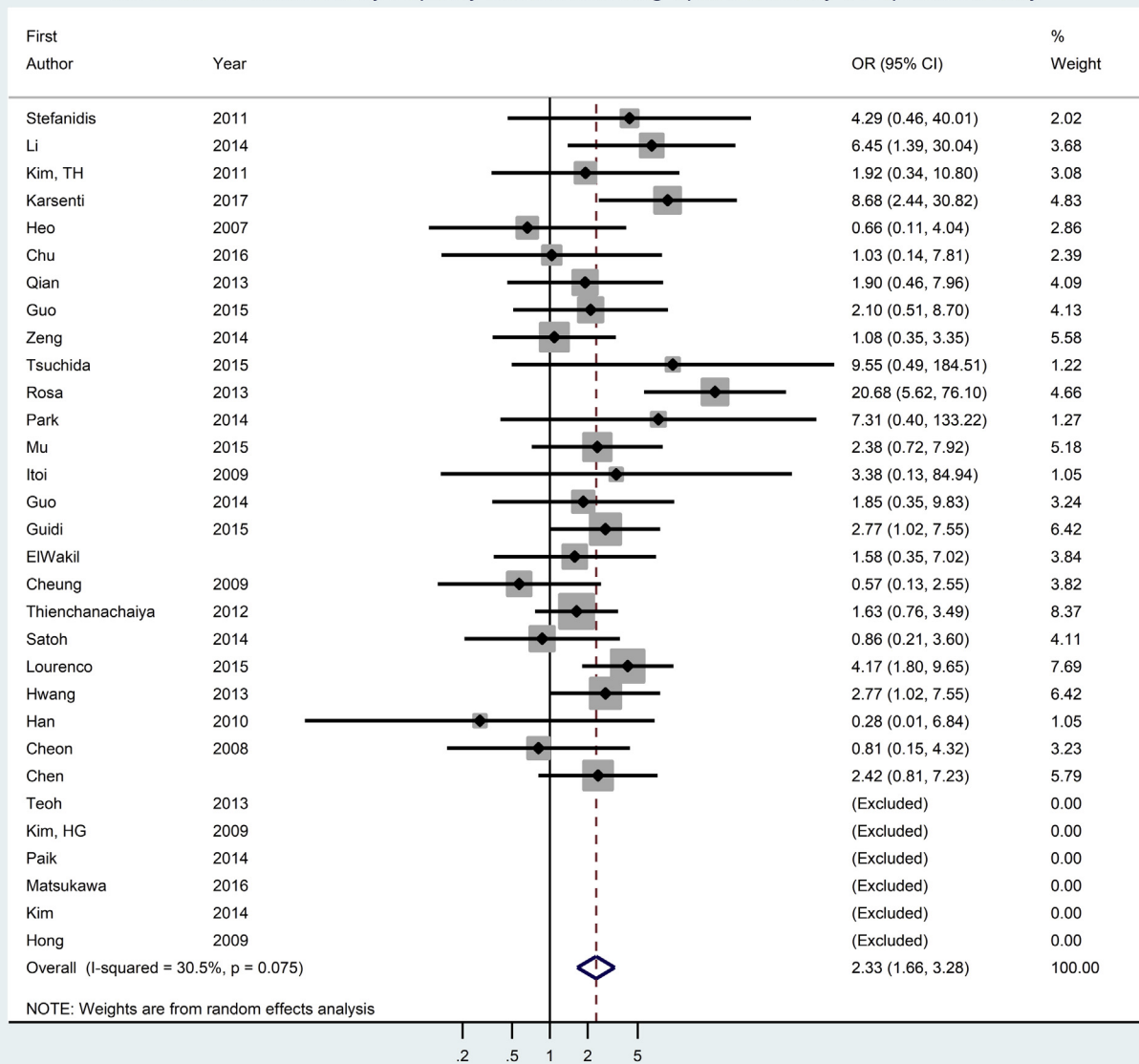


Supplementary Figure 2. Quality parameters of studies comparing early ERCP versus conservative management for choledocholithiasis. (Adapted from Meeralam et al,²⁵ Figs. 2-3, with permission.)



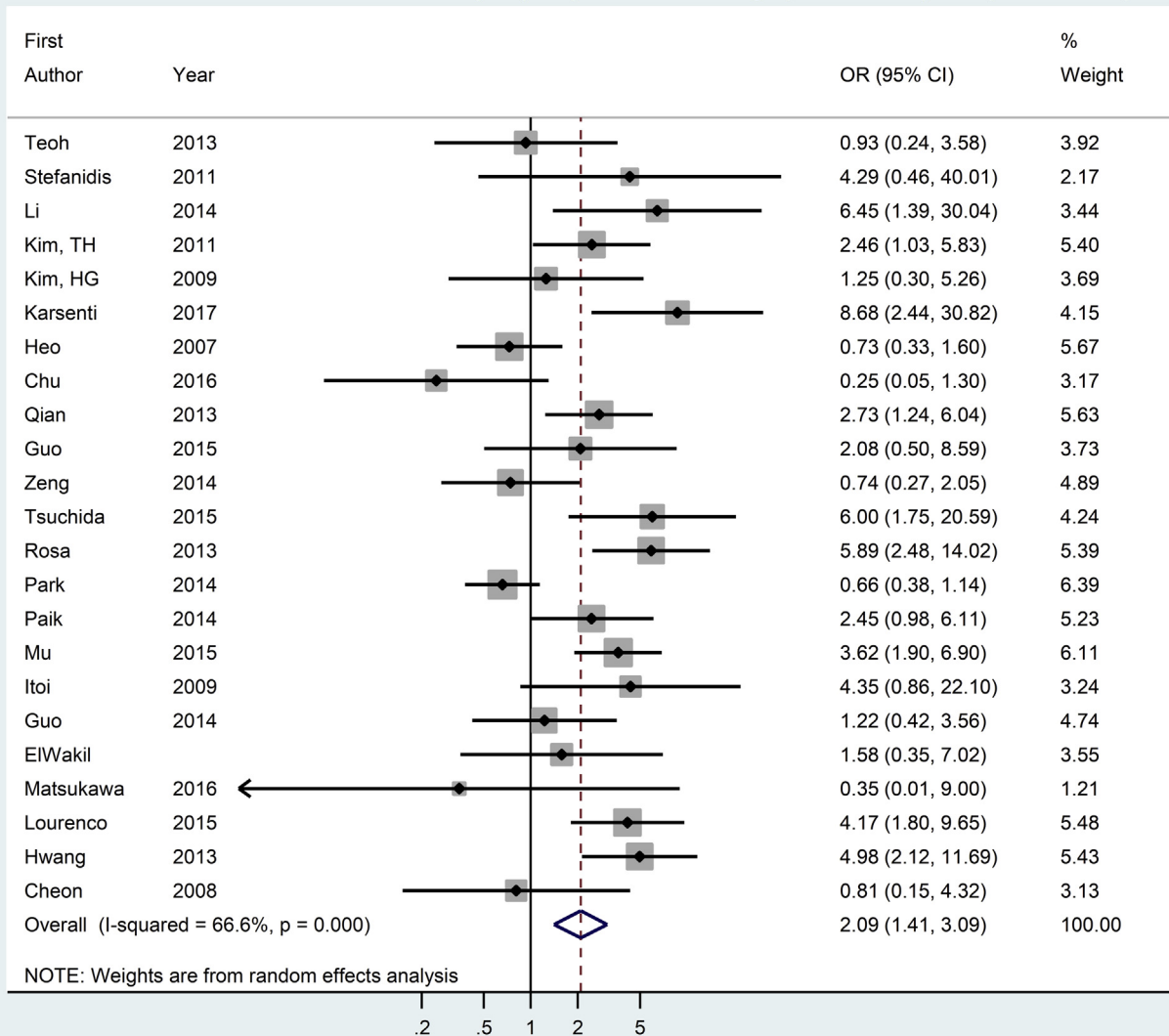
Supplementary Figure 3. Forest plot for randomized trials comparing mechanical lithotripsy requirement by ES-LBD versus ES. *ES-LBD*, Endoscopic sphincterotomy followed by large balloon dilation.

OR of Stone Clearance by Papillary Dilation following Sphincterotomy Vs Sphincterotomy



Supplementary Figure 4. Forest plot for randomized and observational studies comparing stone clearance for ES-LBD versus ES. *ES-LBD*, Endoscopic sphincterotomy followed by large balloon dilation.

OR of First Procedure Stone Clearance by Papillary Dilation following Sphincterotomy Vs Sphincterotomy



Supplementary Figure 5. Forest plot for randomized and observational studies comparing first procedure stone clearance for ES-LBD versus ES. *ES-LBD*, Endoscopic sphincterotomy followed by large balloon dilation.

SUPPLEMENTARY FIGURE 6. Quality parameters of studies comparing large balloon dilation after sphincterotomy versus endoscopic sphincterotomy alone for large (≥ 1 cm) bile duct stones

First author and year	Random sequence generation	Allocation concealment	Incomplete outcomes	Selective reporting	Other
Heo 2007 ⁶⁰	?	?	+	+	?
Kim 2009 ⁶²	?	?	+	+	?
Stefanidis 2011 ⁷⁰	+	+	+	+	?
Teoh 2013 ⁸	+	+	?	+	+
Bo 2013	+	+	?	+	?
Li 2014	+	+	+	?	?
Guo 2015	+	?	+	+	?
Chu 2017	+	?	+	+	?
Karsenti 2017 ⁵⁷	+	+	+	+	?

+, High risk of bias; -, low risk of bias; ?, unclear risk of bias.

Higgins JP, Altman DG, Gotzsche P, et al. The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. *Gut* 2011;18:1-9.

SUPPLEMENTARY TABLE 1. Test characteristics of studies comparing EUS versus MRCP for choledocholithiasis

First author	N	EUS sensitivity 95% CI	EUS specificity (95% CI)	MRCP sensitivity (95% CI)	MRCP specificity (95% CI)
Fernandez-Esparrach ²⁶	135	.97 (.89-1.00)	.85 (.74-.93)	.89 (.78-.95)	.98 (.90-1.00)
Kondo ²⁷	28	1.00 (.86-1.00)	.50 (.07-.93)	.88 (.68-.97)	.75 (.19-.99)
Aube ²⁸	47	.94 (.74-1.00)	.96 (.80-1.00)	.88 (.62-.98)	.96 (.80-1.00)
de Ledinghen ²⁹	32	1.00 (.69-1.00)	.95 (.77-1.00)	1.00 (.69-1.00)	.73 (.50-.89)
Scheiman ¹⁷	30	.89 (.28-.99)	.96 (.78-1.00)	.40 (.05-.85)	.96 (.78-1.00)

Adapted with permission from Meeralam et al,²⁵ Table 1.

SUPPLEMENTARY TABLE 2. Design of studies comparing EUS versus MRCP for choledocholithiasis

First author	Reference test	Time between EUS and MRCP	Blinding
Fernandez-Esparrach ²⁶	ERCP, IOC, long-term (6-month) follow-up	24 h	Index and reference tests
Kondo ²⁷	ERCP	Not reported	Index and reference tests
Aube ²⁸	ERCP, IOC, long-term (3-month) follow-up	<48 h	Index tests
de Ledinghen ²⁹	ERCP or IOC	Not reported	Index tests
Scheiman ¹⁷	ERCP	24 h	Index and reference tests

IOC, intraoperative cholangiography.

Adapted with permission from Meeralam et al,²⁵ Table 1.

SUPPLEMENTARY TABLE 3A. Systematic search for studies comparing endoscopic papillary dilation after sphincterotomy versus sphincterotomy alone for large bile duct stones. Medline

Database Names: Ovid Medline® Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid Medline® Daily, Ovid Medline®
Database Vendor: Wolters Kluwer
Database Coverage: 1946 - Present
Date Last Searched: September 21, 2017
(exp Lasers/ OR exp Laser Therapy/ OR exp Lithotripsy/ OR laser.af OR lasers.af OR lithotripsy.af OR lithotripsie.af OR lithotripsies.af OR litholapaxy.af OR litholapaxie.af OR litholapaxies.af OR lithotripty.af OR lithotripter.af OR lithotriptor.af OR ESWL.af OR ESWLs.af OR shock-wave.af OR shockwave.af OR "pulveriz*".af)
AND
(expCholedocholithiasis/ OR exp Common Bile Duct/ OR "common bile duct".af OR choledocholithiasis.af OR choledocholithias.es.af OR ("bile duct".af OR biliary.af OR choledochal.af OR choledochus.af OR "common duct".af) adj8 (stone.af OR stones.af OR calculus.af OR calculi.af OR gallstone.af OR gallstones.af OR "gall stone".af OR "gallstones".af))

SUPPLEMENTARY TABLE 3B. Embase

Database Name: Embase & Embase Classic
Database Vendor: Elsevier
Database Coverage: 1947 - Present
Date Last Searched: September 21, 2017
('laser'/exp OR 'low level laser therapy'/exp OR 'lithotripsy'/exp OR 'lithotripter'/exp OR laser OR lasers OR lithotrip* OR litholapaxy OR litholapaxie OR litholapaxies OR lithotripty OR ESWL OR ESWLs OR 'shock wave' OR shockwave OR pulveriz*)
AND
(('common bile duct stone'/exp OR 'common bile duct'/exp OR 'common bile duct' OR choledocholithiasis OR choledocholithias.es) OR (('bile duct' OR biliary OR choledochal OR choledochus OR 'common duct') NEAR/8 (stone OR stones OR calculus OR calculi OR gallstone OR gallstones OR 'gall stone' OR 'gall stones')))

SUPPLEMENTARY TABLE 3C. Cochrane

Database Name: Cochrane Library
Database Vendor: Wiley
Issues Searched: Cochrane Reviews (Issue 9 of 12, September 2017) Other Reviews (Issue 2 of 4, April 2015) Trials (Issue 9 of 12, September 2017) Methods Studies (Issue 3 of 4, July 2012) Technology Assessments (Issue 4 of 4, October 2016) Economic Evaluations (Issue 2 of 4, April 2015)
Date Last Searched: September 21, 2017
[mh lasers] OR [mh "laser therapy"] OR [mh lithotripsy] OR laser OR lasers OR lithotripsy OR lithotripsies OR litholapaxy OR lithotripty OR lithotripter OR ESWL OR ESWLs OR 'shock wave' OR shockwave OR pulveriz*)
AND
(([mh choledocholithiasis] OR [mh "common bile duct"] /exp OR 'common bile duct'/exp OR 'common bile duct' OR choledocholithiasis OR choledocholithias.es) OR (('bile duct' OR biliary OR choledochal OR choledochus OR "common duct") AND (stone OR stones OR calculus OR calculi OR gallstone OR gallstones OR 'gall stone' OR 'gall stones')))

SUPPLEMENTARY TABLE 3D. Web of Science

Database Names: Web of Science Core Collection
Database Vendor: Clarivate Analytics
Database Coverage: Science Citation Index Expanded (1900-present)
Social Sciences Citation Index (1900-present)
Arts & Humanities Citation Index (1975-present)
Conference Proceedings Citation Index-Science (1990-present)
Conference Proceedings Citation Index-Social Science & Humanities (1990-present)
Book Citation Index -Science (2005-present)
Book Citation Index - Social Sciences & Humanities (2005-present)
Emerging Sources Citation Index (2015-present)
Current Chemical Reactions (1985-present)
Index Chemicus (1993-present)
Date Last Searched: September 21, 2017
(lasers OR lithotrip* OR litholapaxy OR litholapaxie OR litholapaxies OR lithotrity OR
ESWL OR ESWLs OR shock-wave OR shockwave OR pulveriz*)
AND
((“common bile duct” OR choledocholithiasis OR choledocholithiases) OR (“bile duct” OR biliary OR choledochal OR choledocus OR “common duct”
NEAR/8
(stones OR calculi OR gallstones OR “gall stone” OR “gall stones”))

SUPPLEMENTARY TABLE 4A. Systematic search for studies of intraductal and conventional treatment of large and difficult bile duct choledocholithiasis. Medline

Database Names: Ovid Medline® Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid Medline® Daily, Ovid Medline®
Database Vendor: Wolters Kluwer
Database Coverage: 1946 - Present
Date Last Searched: November 16, 2017
(exp Balloon Enteroscopy/ OR exp Dilatation/ OR Balloon.af. OR Dilatation.af. OR Dilation.af. OR Dilate.af.)
AND
(exp Sphincterotomy, Endoscopic/ OR “Sphincter of Oddi”/su OR Sphincterotomy, Transhepatic/ OR “Ampulla of Vater”/su OR exp
Cholangiopancreatography, Endoscopic Retrograde/ OR Endoscopic Retrograde Cholangiopancreatography.af. OR Endoscopic Retrograde
Cholangiopancreatographies.af. OR Sphincterotomy.af. OR Sphincterotomies.af. OR Papillotomy.af. OR Papillotomies.af. OR Sphincteroplasty.af. OR
Sphincteroplasties.af. OR Papillosphincteroplasty.af. OR Papillosphincteroplasties.af. OR Papillostomy.af. OR papillostomies.af.)
AND
(exp Choledocholithiasis/ OR exp Common Bile Duct/ OR “common bile duct”.af OR choledocholithiasis.af OR choledocholithiases.af OR (“bile duct”.af
OR biliary.af OR choledochal.af OR choledochus.af OR “common duct”.af) adj8 (stone.af OR stones.af OR calculus.af OR calculi.af OR gallstone.af OR
gallstones.af OR “gall stone”.af OR “gall stones”.af))

SUPPLEMENTARY TABLE 4B. Embase

Database Name: Embase & Embase Classic
Database Vendor: Elsevier
Database Coverage: 1947 - Present
Date Last Searched: November 16, 2017
('balloon enteroscopy'/exp OR 'balloon dilatation'/exp OR 'balloon catheterization'/exp OR 'balloon'/exp OR 'dilatation'/exp OR 'dilatation catheter'/exp OR dilatation OR dilation OR dilate)
AND
('sphincterotomy'/exp OR 'endoscopic sphincterotomy'/exp OR 'vater papillotomy'/exp OR 'endoscopic retrograde cholangiopancreatography'/exp OR (Endoscopic AND Retrograde AND Cholangiopancreatography) OR (Endoscopic AND Retrograde AND Cholangiopancreatographies) OR Sphincterotomy OR Sphincterotomies OR Papillotomy OR Papillotomies OR Sphincteroplasty OR Sphincteroplasties OR Papillosphincteroplasty OR Papillosphincteroplasties OR Papillostomy OR papillostomies)
AND
(('common bile duct stone'/exp OR 'common bile duct'/exp OR 'common bile duct' OR choledocholithiasis OR choledocholithiasis) OR (('bile duct' OR biliary OR choledochal OR choledochus OR 'common duct') NEAR/8 (stone OR stones OR calculus OR calculi OR gallstone OR gallstones OR 'gall stone' OR 'gall stones')))

SUPPLEMENTARY TABLE 4C. Cochrane

Database Name: Cochrane Library
Database Vendor: Wiley
Issues Searched: Cochrane Reviews (Issue 9 of 12, September 2017)
Other Reviews (Issue 2 of 4, April 2015)
Trials (Issue 9 of 12, September 2017)
Methods Studies (Issue 3 of 4, July 2012)
Technology Assessments (Issue 4 of 4, October 2016)
Economic Evaluations (Issue 2 of 4, April 2015)
Date Last Searched: November 16, 2017
#1 MeSH descriptor: [Choledocholithiasis] explode all trees
#2 MeSH descriptor: [Common Bile Duct] explode all trees
#3 "common bile duct"
#4 choledocholithiasis
#5 #1 or #2 or #3 or #4
#6 "bile duct"
#7 biliary
#8 choledochal
#9 choledochus
#10 "common duct"
#11 #6 or #7 or #8 or #9 or #10
#12 stone
#13 stones
#14 calculus
#15 calculi
#16 gallstone
#17 gallstones
#18 "gall stone"

(continued on the next page)

SUPPLEMENTARY TABLE 4C. Continued

#19	"gall stones"
#20	#12 or #13 or #14 or #15 or #16 or #17 or #18 or #19
#21	#11 and #20
#22	#5 or #21
#23	MeSH descriptor: [Balloon Enteroscopy] explode all trees
#24	MeSH descriptor: [Dilatation] explode all trees
#25	Balloon
#26	Dilatation
#27	Dilation
#28	Dilate
#29	#23 or #24 or #25 or #26 or #27 or #28
#30	MeSH descriptor: [Sphincterotomy, Endoscopic] explode all trees
#31	MeSH descriptor: [Sphincterotomy, Transduodenal] explode all trees
#32	MeSH descriptor: [Cholangiopancreatography, Endoscopic Retrograde] explode all trees
#33	Endoscopic Retrograde Cholangiopancreatography
#34	Endoscopic Retrograde Cholangiopancreatographies
#35	Sphincterotomy
#36	Sphincterotomies
#37	Papillotomy
#38	Papillotomies
#39	Sphincteroplasty
#40	Sphincteroplasties
#41	Papillosphincteroplasty
#42	Papillosphincteroplasties
#43	Papillostomy
#44	papillostomies
#45	#30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44
#46	#22 and #29 and #45

SUPPLEMENTARY TABLE 4D. Web of Science

Database Names: Web of Science Core Collection
Database Vendor: Clarivate Analytics
Database Coverage: Science Citation Index Expanded (1900-present)
Social Sciences Citation Index (1900-present)
Arts & Humanities Citation Index (1975-present)
Conference Proceedings Citation Index- cience (1990-present)
Conference Proceedings Citation Index-Social Science & Humanities (1990-present)
Book Citation Index -Science (2005-present)
Book Citation Index - Social Sciences & Humanities (2005-present)
Emerging Sources Citation Index (2015-present)
Current Chemical Reactions (1985-present)
Index Chemicus (1993-present)
Date Last Searched: November 16, 2017
(Balloon OR Dilatation OR Dilation OR Dilate)
AND
(Endoscopic Retrograde Cholangiopancreatography OR Endoscopic Retrograde Cholangiopancreatographies OR Sphincterotomy OR Sphincterotomies OR Papillotomy OR Papillotomies OR Sphincteroplasty OR Sphincteroplasties OR Papillosphincteroplasty OR Papillosphincteroplasties OR Papillostomy OR papillostomies)
AND
((“common bile duct” OR choledocholithiasis OR choledocholithiases) OR (“bile duct” OR biliary OR choledochal OR choledocus OR “common duct”) NEAR/8 (stones OR calculi OR gallstones OR “gall stone” OR “gall stones”)))

SUPPLEMENTARY TABLE 5. Quality parameters (Newcastle-Ottawa Scale tool) of studies of intraductal and conventional treatment of large and difficult bile duct choledocholithiasis

First author	Year	Journal	Publication type	Study type	Selection	Comparability	Exposure/outcome
Akaraviputh	2013	Surg Endo	Abstract	Cohort	****		***
Akcakaya	2009	HPB Dis Int	Full article	Cohort	****	**	***
AlAmri	1997	Saudi Med J	Full article	Cohort	****	**	***
Alhalel	1995	GIE	Abstract	Cohort	****		***
Aljebreen	2014	Saudi J Gastro	Full article	Cohort	****	**	***
Arya	2004	AJG	Full article	Cohort	****		***
Aslan	2014	PrzGastro	Full article	Cohort	****	**	***
Attasaranya	2008	GIE	Full article	Cohort	****	*	***
Binmoeller ⁷²	1993	Endoscopy	Full article	Cohort	****		***
Chan	2011	BMC Gastro	Full article	Cohort	****		***
Chander	2011	GIE	Abstract	Cohort	****		***
Chang ⁷¹	2005	WJG	Full article	Cohort	****	*	***
Chen	2011	GIE	Full article	Cohort	****		***
Cheng	2012	WJG	Full article	Cohort	****	**	***
Cho	2009	GIE	Full article	Cohort	****		***
Choi	2009	GIE	Full article	Cohort	****		***
Choi	2012	JGH	Full article	Cohort	****		***
Chung	1991	Brit J Surg	Full article	Cohort	****		***
Cipolletta	1997	Brit J Surg	Full article	Cohort	****	*	***
DiMitre	2016	WJG Endo	Full article	Cohort	****		***
Draganov	2009	JCG	Full article	Cohort	****		***
Elkholy	2015	HPB	Abstract	Unclear	****		***
Ell	1993	GIE	Full article	Cohort	****	*	***
Ersoz ⁵⁴	2003	GIE	Full article	Cohort	****		***
Fan ³⁶	1989	Aus Nz Surg	Full article	Cohort	****		***
Farrell	2005	Endoscopy	Full article	Cohort	****		***
Fujita	2017	Gut and Liver	Full article	Cohort	****		***
Garg ⁶⁸	2004	GIE	Full article	Cohort	****	**	***
Gunasingam	2017	JGH	Abstract	Cohort	****		***
Guo ⁶⁶	2014	WJG	Full article	Cohort	****	**	***
Han ¹²⁸	2009	AJG	Full article	Cohort	****		***
Han	2010	Dig Endo	Abstract	Cohort	****		***
Hanumantharaya	2014	Gut	Abstract	Cohort	****		***
Harada	2013	JHBP	Full article	Cohort	****	**	***
Hartery ¹³²	2017	GIE	Full article	Cohort	****		***
Heetun	2015	Irish J	Abstract	Cohort	****		***
Hochberger	1998	Gut	Full article	Cohort	****		***
Hong	2009	GIE	Abstract	Unclear	****	*	***
Huang	2017	Dig Liv Dis	Full article	Cohort	****		***
Hui ¹²⁶	2003	Ali Pharm Thera	Full article	Cohort	****	**	***
Hwang	2013	BMC Gastro	Full article	Cohort	****	**	***
Itoi ⁷⁵	2010	GIE	Full article	Cohort	****		***
Jain ¹³⁰	2000	GIE	Full article	Cohort	****		***
Jakobs	2007	Arq de Gastro	Full article	Cohort	****		***

(continued on the next page)

SUPPLEMENTARY TABLE 5. Continued

First author	Year	Journal	Publication type	Study type	Selection	Comparability	Exposure/outcome
Jang	2013	Dig Dis Diet	Full article	Cohort	****		***
Jeong	2012	GIE	Abstract	Cohort	****		***
Jeong	2015	GIE	Abstract	Cohort	****		***
Johnson	1993	GIE	Full article	Cohort	****		***
Jun Bo ⁶⁵	2013	Pakistan J	Full article	Cohort	****	**	***
Kalaitzakis	2012	Eur JGH	Full article	Cohort	****		***
Kamada	2015	JGH (Aus)	Abstract	Cohort	****		***
Karsenti ⁵⁷	2017	Endoscopy	Full article	Cohort	****	**	***
Katsinelos	2003	Ann Gastro	Full article	Cohort	****		***
Katsinelos	2008	Dig Liv Dis (Italy)	Full article	Cohort	****	**	***
Kim	2007	GIE	Full article	Cohort	****		***
Kim	2008	WJG	Full article	Cohort	****		***
Kim ⁶²	2009	WJG	Full article	Cohort	****		***
Kim	2010	Digestion	Abstract	Cohort	****		***
Kim	2010	WJG	Full article	Cohort	****		***
Kim	2010	Dig Endo	Abstract	Cohort	****		***
Kim	2011	Surg Endo	Full article	Cohort	****	**	***
Kim	2011	JGH	Abstract	Cohort	****		***
Kim	2011	GIE	Full article	Cohort	****		**
Kim	2012	GIE	Abstract	Cohort	****		***
Kim	2014	UE Gastro J	Abstract	Cohort	****		***
Kochhar	2009	DDS	Full article	Cohort	****		***
Kumar	2011	AJG	Abstract	Cohort	****		***
Kuo	2016	BMC Gastro	Full article	Cohort	****		***
Kurita	2010	Scand J Gastro	Full article	Cohort	****		***
Kurland	2009	GIE	Abstract	Cohort	****		***
Kwok	2009	GIE	Abstract	Cohort	****		***
Laleman	2014	Surg Endo	Full article	Cohort	****		***
Lee	2007	Scand J Gastro	Full article	Cohort	****		***
Lee	2007	Dig Endo	Full article	Cohort	****		***
Lee	2010	Endoscopy	Full article	Cohort	****		***
Lee	2011	GIE	Full article	Cohort	****		***
Lee	2012	Photomed Surg	Full article	Cohort	****		***
Lee	2016	JGH	Abstract	Cohort	****		***
Lekharaju	2013	JGH	Abstract	Cohort	****		***
Lesmana	1999	Med J Indonesia	Full article	Cohort	****		***
Leung	1988	GIE	Full article	Cohort	****		***
Li	2015	GIE	Abstract	Cohort	****		***
Liu	2011	Endoscopy	Full article	Cohort	***		***
Lourenço	2015	UE Gastro J	Abstract	Cohort	****		***
Luz	2012	GIE	Abstract	Cohort	****		***
Matsukawa	2016	GIE	Abstract	Cohort	****		***
Matsumi	2014	JGH	Abstract	Case control	*	*	***
Matsumoto	2016	Surg Endo	Full article	Cohort	****		***
Maydeo	2007	Endoscopy	Full article	Cohort	****		***

(continued on the next page)

SUPPLEMENTARY TABLE 5. Continued

First author	Year	Journal	Publication type	Study type	Selection	Comparability	Exposure/outcome
Maydeo ⁷³	2011	GIE	Full article	Cohort	****		***
Merino-Rodríguez	2013	UE Gastro J	Abstract	Cohort	****		***
Minami	2007	WJG	Full article	Cohort	****		***
Misra	2008	Endoscopy	Full article	Cohort	****		***
Moon	2004	GIE	Full article	Cohort	****		***
Moon	2009	AJG	Full article	Cohort	****		***
Mu	2015	DDS	Full article	Cohort	****		***
Navaneethan ⁶⁹	2016	GIE	Full article	Cohort	****		***
Neuhaus	1990	GIE	Abstract	Cohort	****		***
Neuhaus	1993	Gut	Full article	Cohort	****		***
Neuhaus	1994	GIE	Full article	Cohort	****		***
Ödemış	2016	Gastro Res Prac	Full article	Cohort	****	**	***
Omuta	2011	JGH	Abstract	Cohort	****		***
Omuta	2015	WJG	Full article	Cohort	****		***
Paik	2014	Gut and Liver	Full article	Cohort	****		***
Panpimanmas	2000	J Med Assoc Thai	Full article	Cohort	****		***
Park ⁶⁴	2013	DDS	Full article	Cohort	****		***
Park	2014	DDS	Full article	Cohort	****		***
Park	2016	DDS	Full article	Cohort	****		***
Paspatis	2013	Dig Liv Dis	Full article	Cohort	****		***
Patel	2014	GIE	Full article	Cohort	****		***
Pisello	2008	Langenbecks Ar Surg	Full article	Cohort	****		***
Poincloux	2013	Scand J Gastro	Full article	Cohort	****		***
Ponchon	1991	Gastroenterology	Full article	Cohort	****		***
Prat	1994	GIE	Full article	Cohort	****		***
Putta	2009	Gut	Abstract	Cohort	****		***
Rebello	2012	WJG	Full article	Cohort	****		***
Riemann	1984	GIE	Full article	Cohort	****		*
Rosa	2013	WJG	Full article	Cohort	****		***
Sakai	1999	Unknown	Abstract	Cohort	****		***
Sakai	2013	Hepato-Gastro	Full article	Cohort	****		***
Sandha	2016	GIE	Abstract	Cohort	****		***
Satoh	2014	Pancreas	Abstract	Cohort	****		***
Sauer	2013	DDS	Full article	Cohort	****		***
Schreiber	1995	GIE	Abstract	Cohort	****		***
Seelhoff	2009	GIE	Abstract	Cohort	****		***
Sharma	2008	WJG	Full article	Cohort	****		***
Sharma	2014	Ind J Gastro	Full article	Cohort	****		***
Shi	2014	J Lap Adv Surg	Full article	Cohort	****	**	***
Sioulas	2017	Hep Panc Dis Int	Full article	Cohort	****		***
Smith	2009	Gut	Abstract	Cohort	****		***
Soontornmanokul	2013	GIE	Abstract	Cohort	****	*	***
Sorbi	1999	GIE	Full article	Cohort	****		**
Stefanidis ⁷⁰	2011	AJG	Full article	Cohort	****	**	***
Swahn	2010	Surg Endo	Full article	Cohort	****		***

(continued on the next page)

SUPPLEMENTARY TABLE 5. Continued

First author	Year	Journal	Publication type	Study type	Selection	Comparability	Exposure/outcome
Swain	1995	GIE	Abstract	Cohort	****		**
Swan	2013	JGH	Abstract	Cohort	****		***
Tariq Berlas	2009	Gut	Abstract	Cohort	****		***
Thienchanachaiya	2012	GIE	Abstract	Cohort	****	**	***
Tonozuka	2014	DDS	Full article	Cohort	****	*	***
Tsuchida	2015	BMC Gastro	Full article	Cohort	****	**	***
Tsutsumi	2016	GIE	Abstract	Cohort	****		***
Tsuyuguchi ¹¹¹	2011	Surg Endo	Full article	Cohort	****	**	***
Uskudar	2013	Turkish J Gastro	Full article	Cohort	****		***
Vij	1995	Ind J Gastro	Full article	Cohort	****		***
Wan	2011	Hep Panc Dis Int	Full article	Cohort	****		***
Wong	2017	Endo Int Open	Full article	Cohort	****		***
Xinopoulos	2013	GIE	Abstract	Cohort	****		***
Xu	2017	WJG	Full article	Cohort	****		***
Yamauchi	2017	Surg Endo	Full article	Cohort	****		***
Yang	2013	J Dig Dis	Full article	Cohort	****		***
Ye	2016	Turkish J Gastro	Full article	Cohort	****		***
Yoo	2009	GIE	Abstract	Cohort	****		***
Yoon	2014	Dig Endo	Full article	Cohort	****		***
Yüksel	2016	Turkish J Med Sci	Full article	Cohort	****		***
Zeng	2014	J Dig Dis	Abstract	Cohort	****		***
Zippi	2013	W J Clin Cases	Full article	Cohort	****		***

A maximum of 4 stars may be allotted under "Selection," a maximum of 2 stars may be allotted under "Comparability," and a maximum of 3 stars may be allotted under "Exposure/Outcome."

From Wells GA, Shea B, O'Connell D, et al. The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomised studies in meta-analyses. Ottawa, Ontario, Canada: Ottawa Hospital Research Institute, 2016.