Appendix H: Data analysis

H.1 Review question 1: Signs, symptoms and risk factors for gallstone disease

Insufficient information was available for data analysis.

H.2 Review question 2: Diagnosing gallstone disease

Results for diagnosing gallbladder stones

	Sens (95% CI)	Spec (95% CI)	+LR (95% CI)	-LR (95% CI)	AUC	Log Likelihood	AIC	BIC
US 1 study Ahmed	1.00 (1.00, 1.00)	0.14 (0.11, 0.17)	1.16 (1.13, 1.20)	0.01 (0.00, 0.02)	0.87	26.32	-42.64	-43.68

Results for diagnosing cholecystitis

	Sens (95% CI)	Spec (95% CI)	+LR (95% CI)	-LR (95% CI)	AUC	Log Likelihood	AIC	BIC
MRCP 1 study Hakansson	0.89 (0.70, 0.96)	0.89 (0.50, 0.99)	13.10 (1.72, 56.70)	0.16 (0.04, 0.40)	0.88	4.60	0.81	-5.73
US 3 studies De Vargas, Hakansson, Park	0.71 (0.28, 0.94)	0.88 (0.64, 0.97)	6.37 (2.07, 16.50)	0.36 (0.08, 0.79)	0.89	5.95	-1.91	-2.95
MRI 1 study Altun	0.95 (0.71, 0.99)	0.69 (0.41, 0.88)	3.41 (1.51, 7.74)	0.12 (0.01, 0.46)	0.94	4.55	0.91	-5.62
CT 1 study De Vargas	0.95 (0.53, 1.00)	0.88 (0.27, 0.99)	20.80 (1.18, 124.00)	0.14 (0.00, 0.70)	0.94	5.26	-0.52	-7.05

H.3 Results for diagnosing common bile duct stones

	Sens (95%CI)	Spec (95%CI)	+LR (95%CI)	-LR (95%CI)	AUC	Log Likelihood	AIC	BIC
MRCP 8 studies Chan, Regan, Soto	0.83 (0.72, 0.91)	0.90 (0.83, 0.95)	9.15 (4.64, 16.60)	0.19 (0.10, 0.32)	0.64	16.27	-22.54	-18.68

	Sens (95%CI)	Spec (95%CI)	+LR (95%CI)	-LR (95%CI)	AUC	Log Likelihood	AIC	BIC
(2002), Griffin, Kondo, Stiris, Sugiyams (1998)								
US 5 studies Regan, Riskes, Sugiyama (1997), Sugiyama (1998) Jovanovic (2011)	0.70 (0.52, 0.83)	0.88 (0.63, 0.97)	9.80 (5.39, 16.60)	0.41 (0.32, 0.50)	0.83	9.56	-9.12	-7.61
EUS 3 studies Kondo, Polkowski, Sugiyama (1997)	0.94 (0.87, 0.97)	0.94 (0.41, 1.00)	51.70 (1.62, 321.00)	0.08 (0.03, 0.16)	0.95	11.32	-12.65	-13.69
CTC 4 studies Kondo, Soto (2000) Stoto (1999), Polkowski	0.82 (0.67, 0.91)	0.84 (0.72, 0.92)	5.42 (2.78, 9.92)	0.23 (0.11, 0.40)	0.18	8.91	-7.81	-7.41
CT 3 studies Sugiyama (1997), Tseng, Soto (2000)	0.76 (0.69, 0.81)	0.90 (0.66, 0.97)	9.32 (2.32, 28.30)	0.28 (0.22, 0.36)	0.79	7.38	-4.76	-5.80

H.4 Review question 3: Predicting which people with asymptomatic gallbladder stones will develop complications

Insufficient information was available for data analysis

H.5 Review question 4a: Managing asymptomatic gallbladder stones

No evidence was identified for this review question

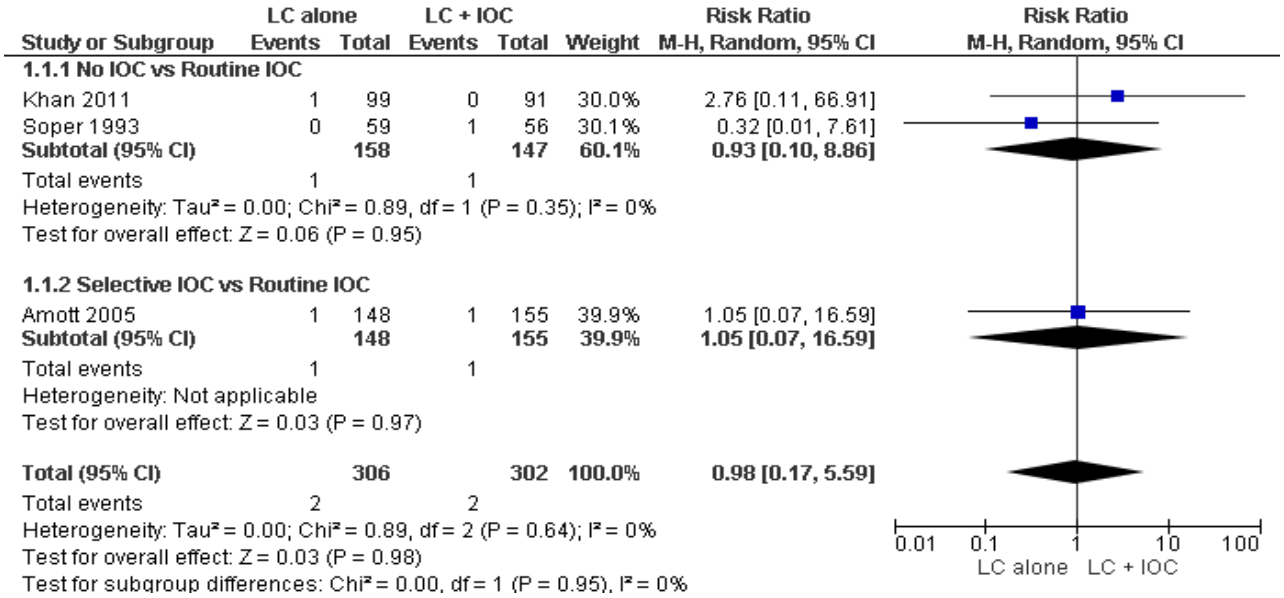
H.6 Review question 4b Managing symptomatic gallbladder stones

H.6.1 Laparoscopic cholecystectomy vs Laparoscopic cholecystectomy plus intraoperative cholangiography

Outcome 1: Bile leak

One study (Soper, 1993) reports that both groups had zero bile duct injuries. Unable to analyse zero event data.

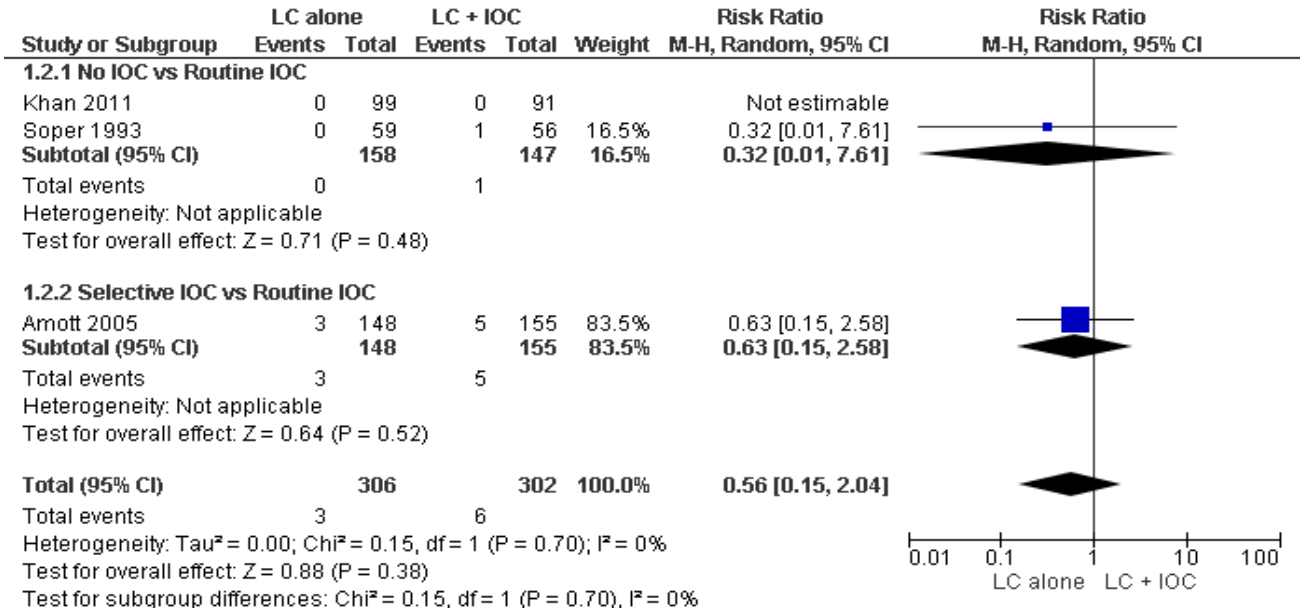
Outcome 2: Bile duct injury



Outcome 3: Length of stay

One study (Soper 1993) reports that both groups had a mean length of stay of 1 day. No measures of dispersion are reported.

Outcome 4: Missed common bile duct stones

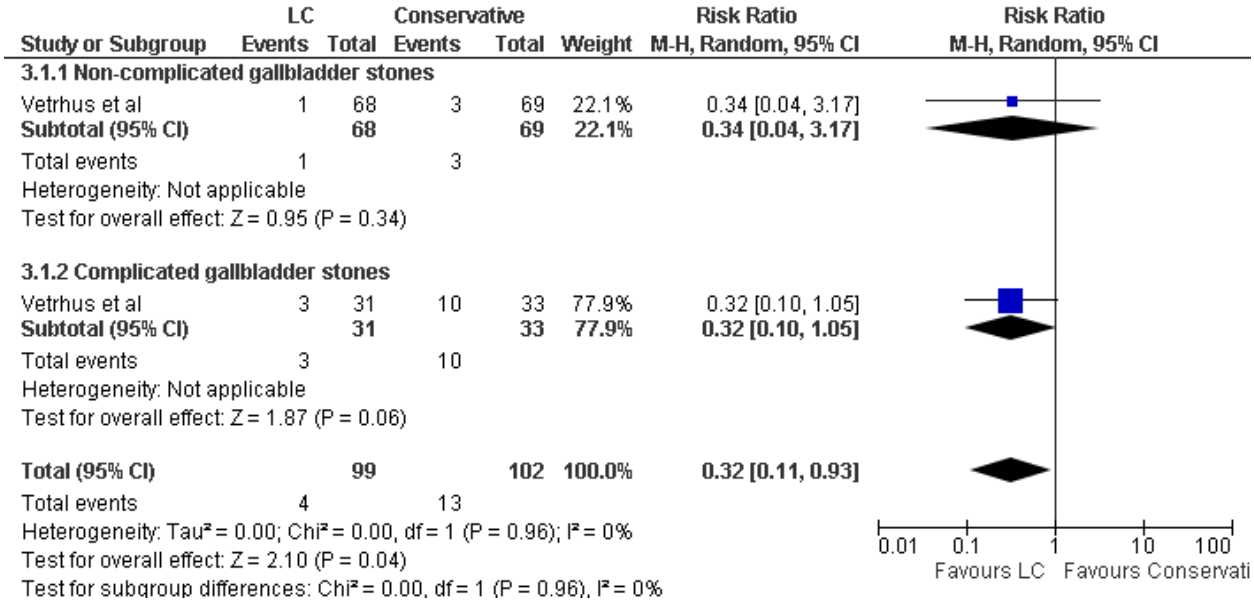


H.6.2 Laparoscopic cholecystectomy compared to cholecystostomy

No evidence was found

H.6.3 Laparoscopic cholecystectomy compared to conservative management

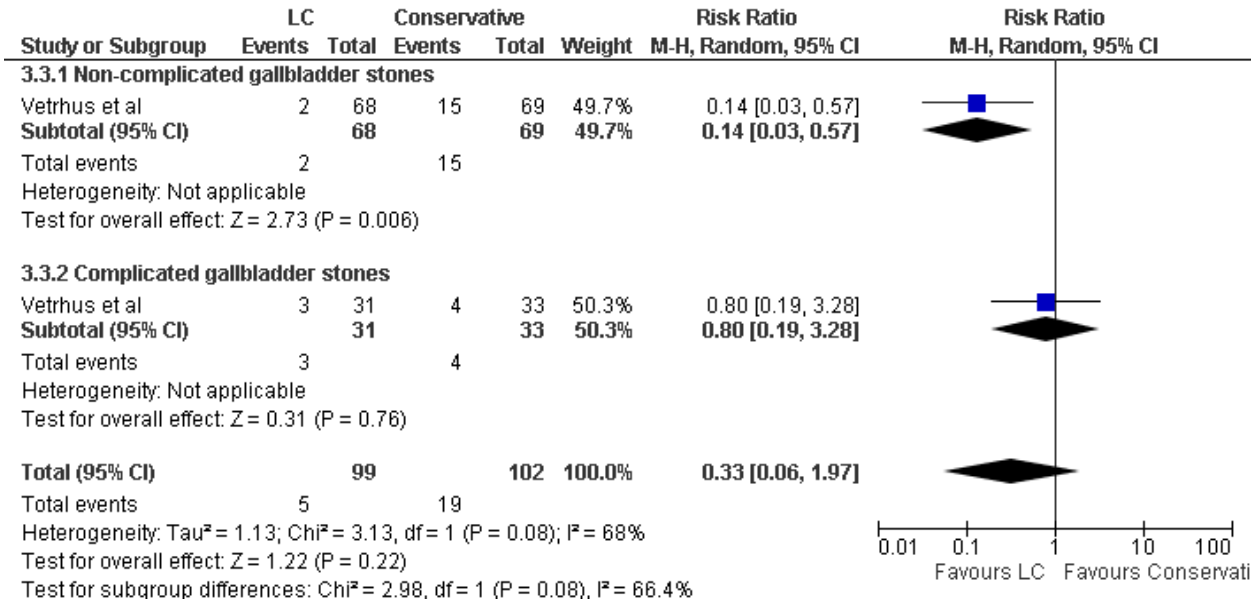
Outcome 1: Disease progression



Outcome 2: Aditional intervention required (cholecystectomy)

45/102 (44.1%) in the conservative management group required cholecystectomy

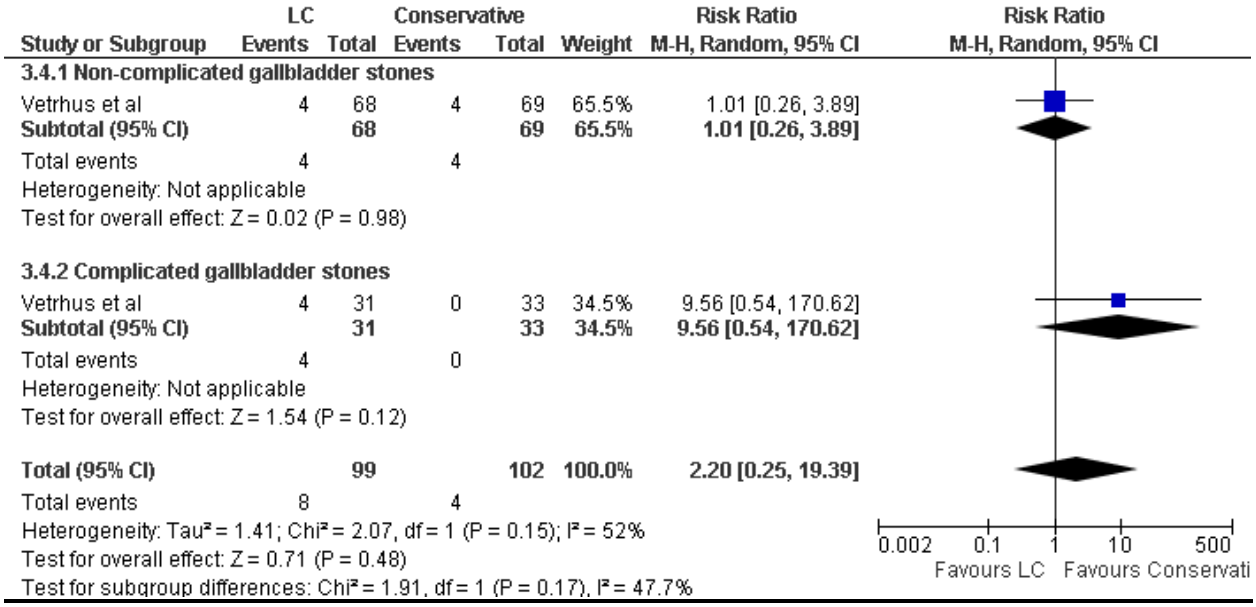
Outcome 3: Readmission (due to biliary pain)



Outcome 4: Length of stay

Not reported

Outcome 5: Mortality

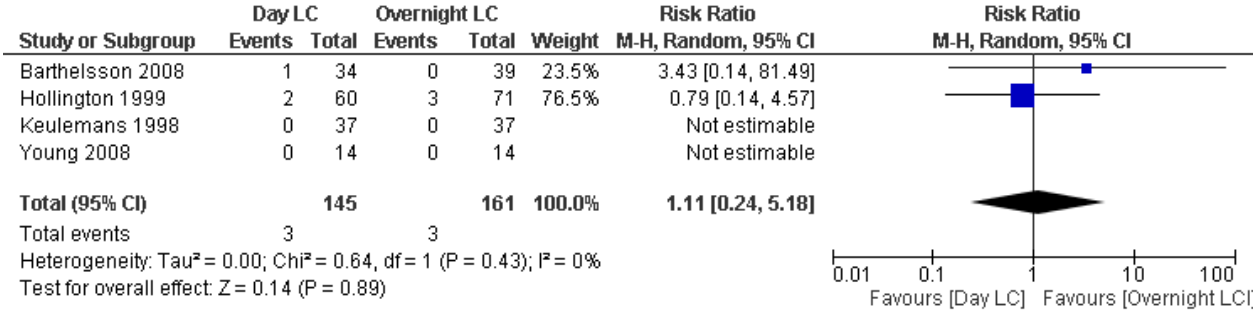


H.6.4 Day case laparoscopic cholecystectomy compared to planned inpatient laparoscopic cholecystectomy

Outcome 1: Failed day case discharge

18/149 (12.1%) of patients in the day case arm had an unplanned inpatient admission.

Outcome 2: Readmission following laparoscopic cholecystectomy



Outcome 3: Length of stay

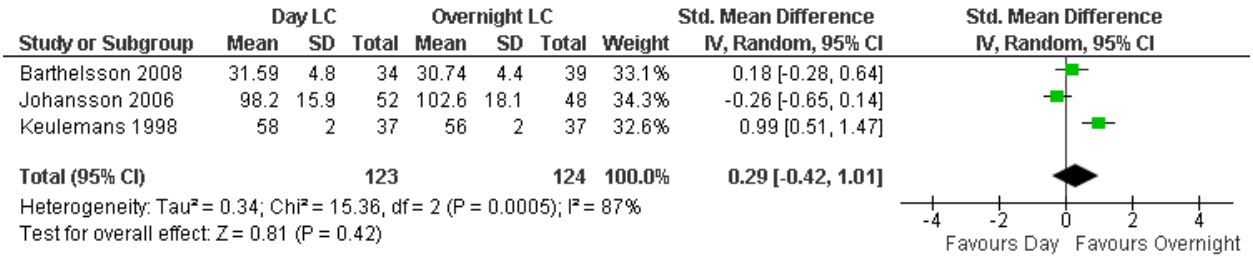
Data could not be pooled:

- Hollington (1999)
  - 31/71 day case patients required prolonged hospitalisation of 2 days or more
- Johansson (2006)
  - 48/52 day case patients were discharged within 4-6 hrs (4 patients were admitted),
  - 42/48 inpatients were discharged on the first day after surgery
  - 6/48 inpatients were discharged on the second day after surgery
- Keulemans (1998)
  - post surgical length of stay was Mean=7.2 SD= 0.8 hrs for the day case group and Mean =31 SD=3 for the inpatient group

Outcome 4: Mortality

Not reported

Outcome 5: Quality of life on day 7 following laparoscopic cholecystectomy



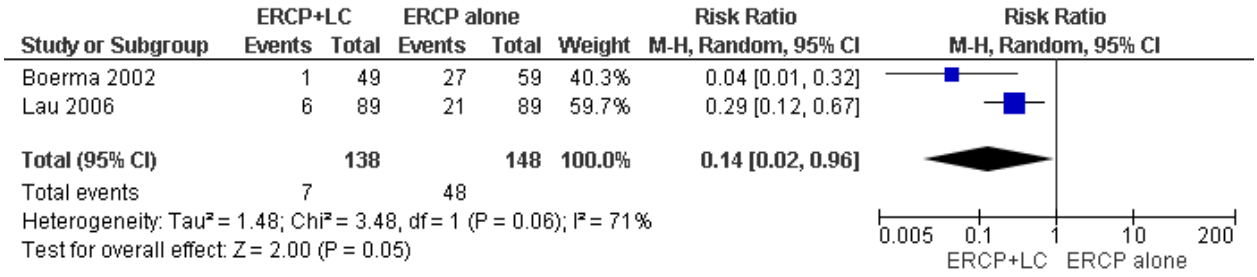
H.7 Review question 4c Managing common bile duct stones

H.7.1 ERCP + Laparoscopic cholecystectomy compared to ERCP alone

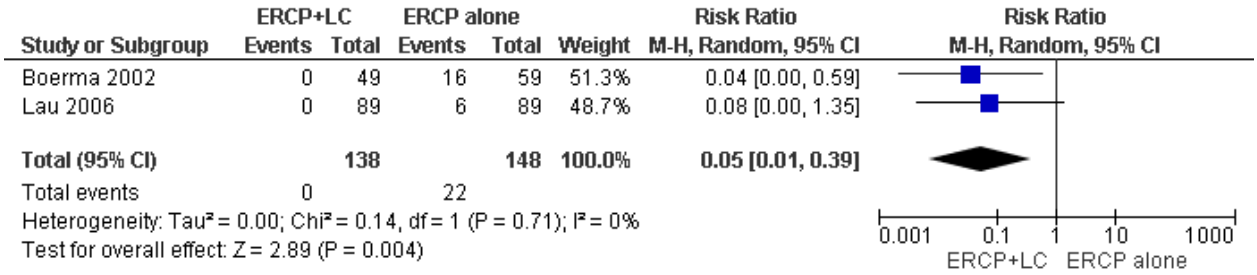
Outcome 1: Quality of life

Not reported

Outcome 2: Disease recurrence/progression



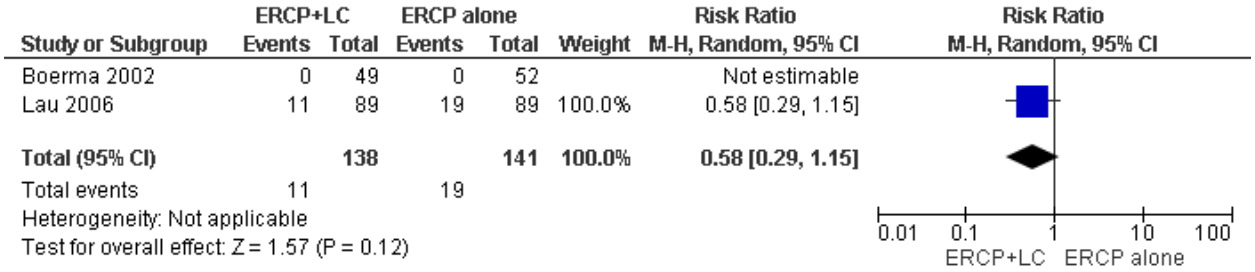
Outcome 3: Additional intervention required (ERCP)



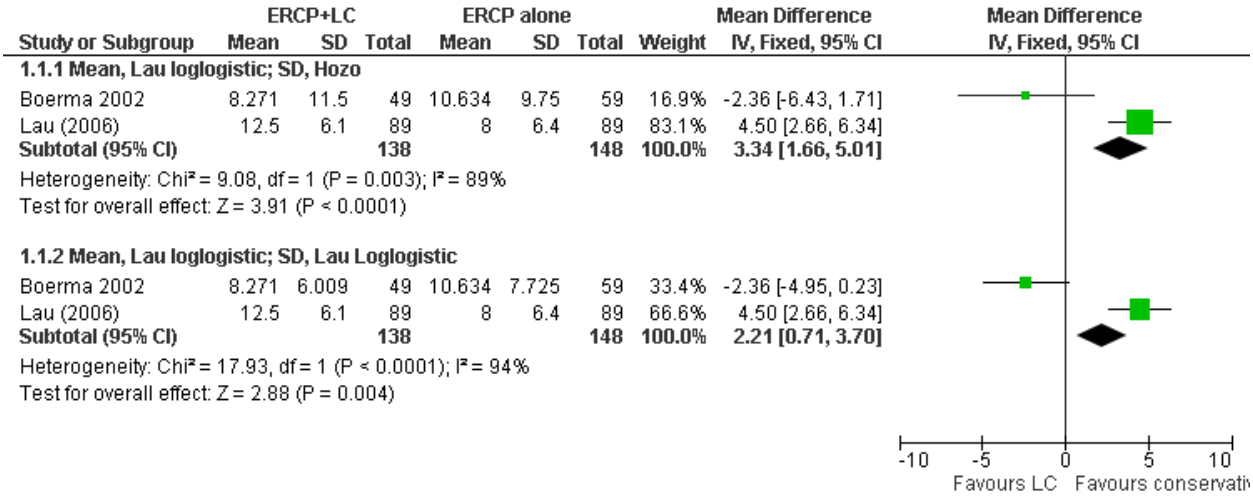
Outcome 4: Additional intervention required (cholecystectomy)

38/148 (25.7%) of people receiving ERCP alon required cholecystectomy

Outcome 5: Mortality

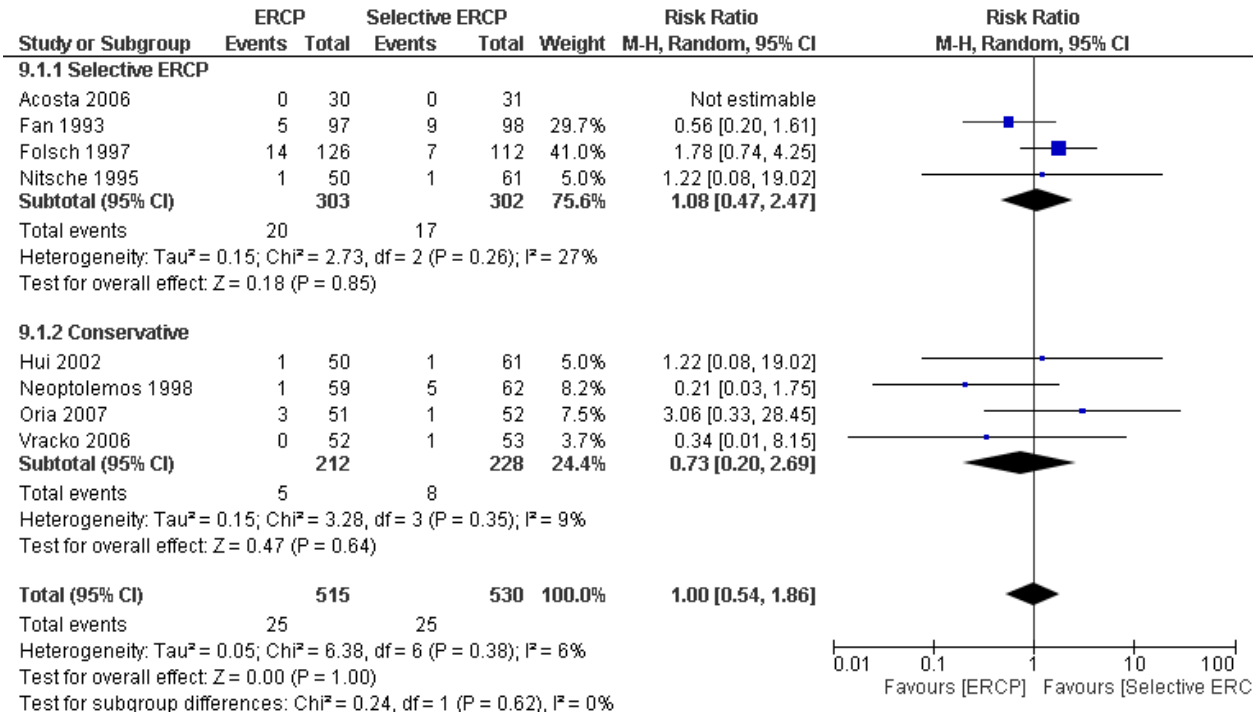


Outcome 6: Length of stay, with sensitivity analysis for methods for calculating Mean and Standard Deviation (Lau Loglogistic with Hozo SD used in final analysis)

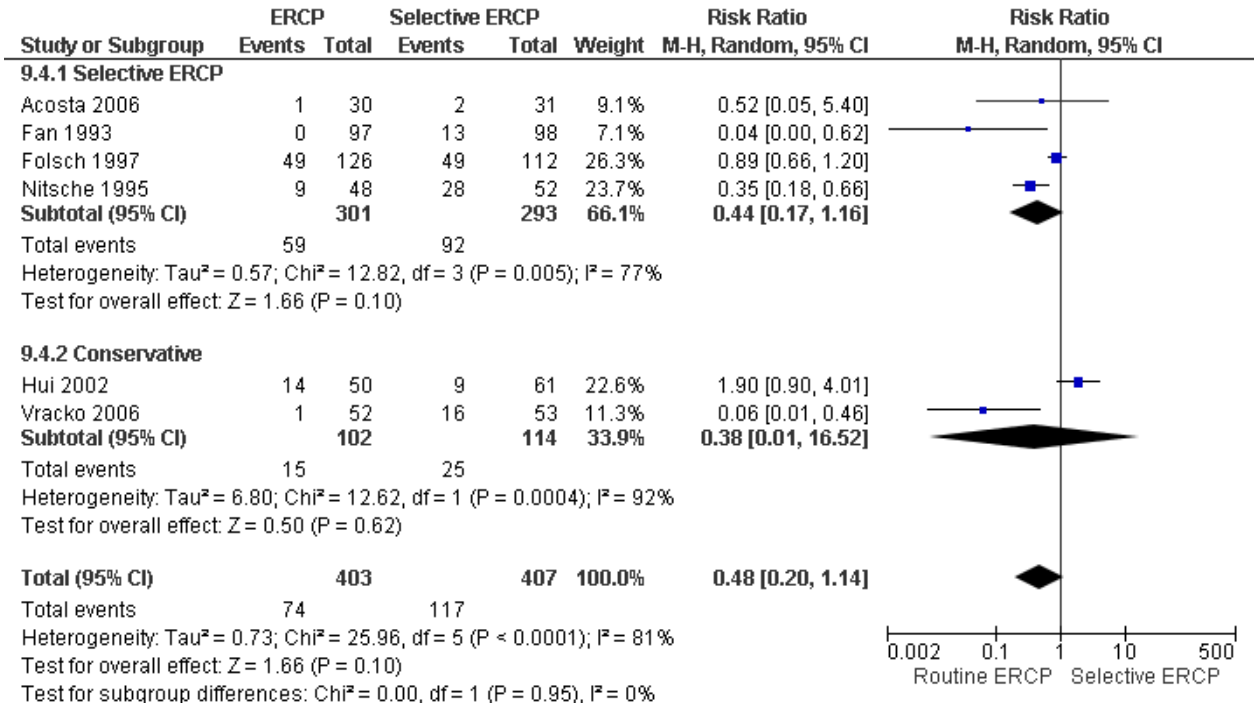


H.7.2 ERCP compared to conservative management

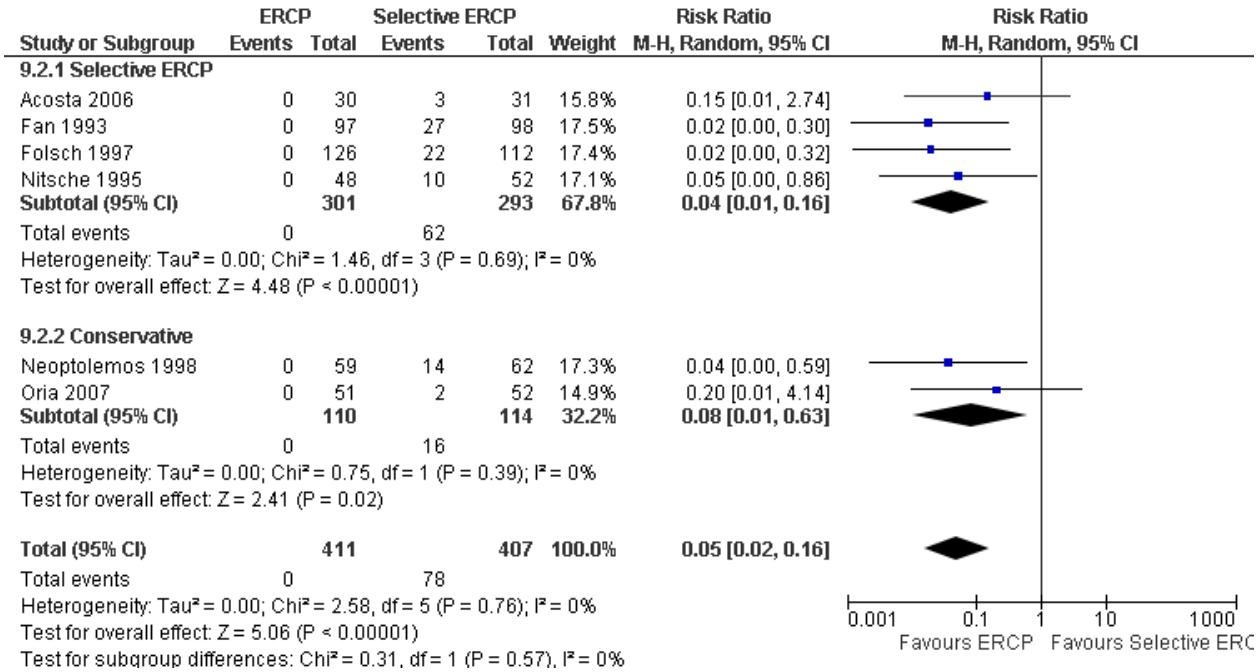
Outcome 1: Mortality



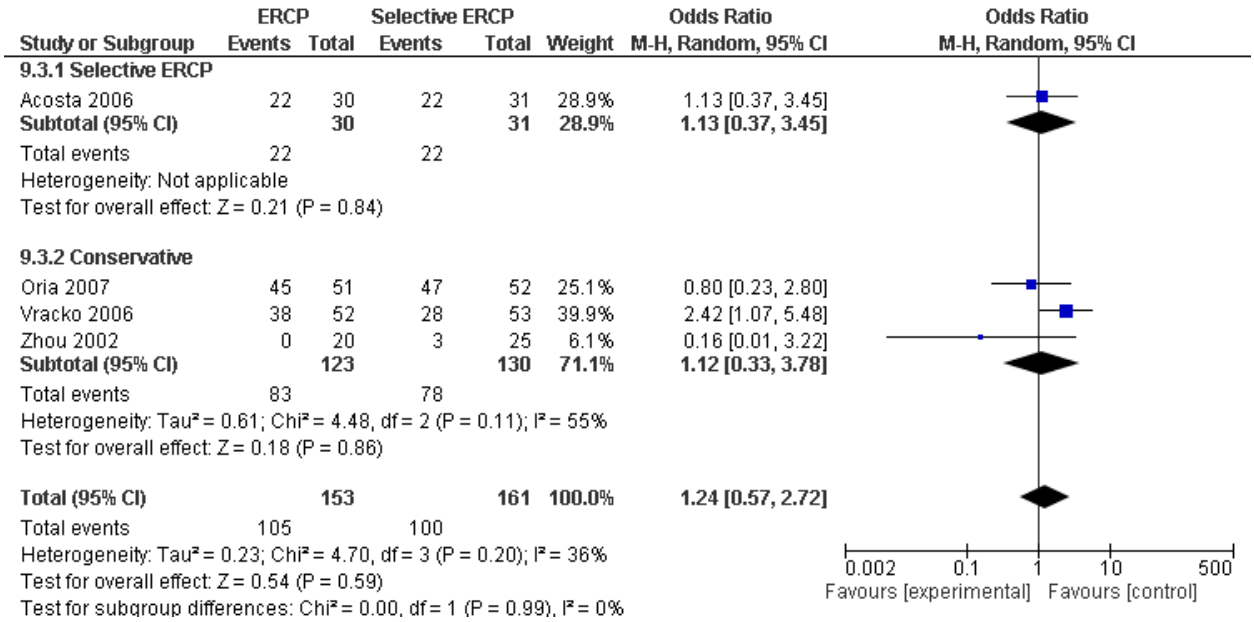
Outcome 2: Disease progression



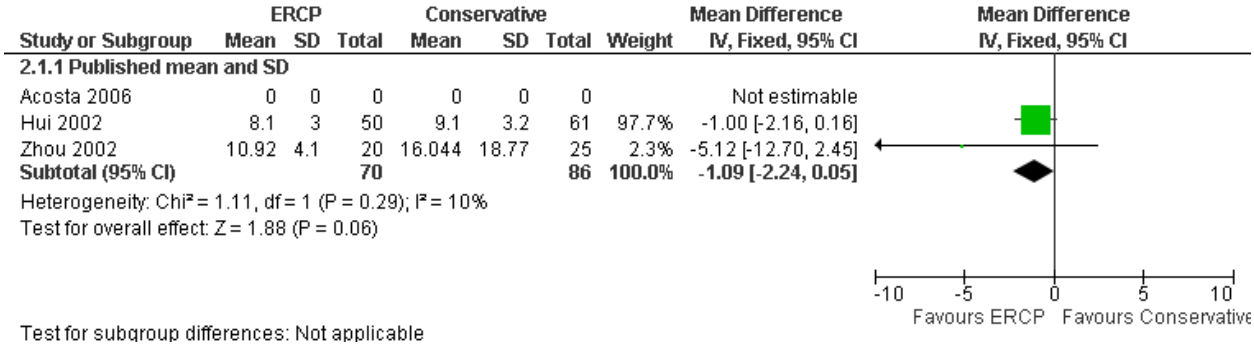
Outcome 3: Additional intervention required (ERCP)



Outcome 4: Additional intervention required (cholecystectomy)



Outcome 6: Length of stay

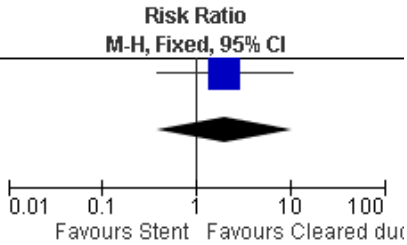


H.7.3 Biliary stent compared to cleared duct

Outcome 1: Mortality

Study or Subgroup	Stent Events	Stent Total	Cleared duct Events	Cleared duct Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Chopra 1996	4	43	2	43	100.0%	2.00 [0.39, 10.35]
Total (95% CI)		**43**		**43**	**100.0%**	**2.00 [0.39, 10.35]**
Total events	4		2			

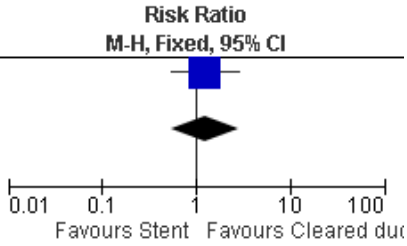
Heterogeneity: Not applicable
Test for overall effect: Z = 0.83 (P = 0.41)



Outcome 2: Disease progression

Study or Subgroup	Stent Events	Stent Total	Cleared duct Events	Cleared duct Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Chopra 1996	10	43	8	43	100.0%	1.25 [0.55, 2.86]
Total (95% CI)		**43**		**43**	**100.0%**	**1.25 [0.55, 2.86]**
Total events	10		8			

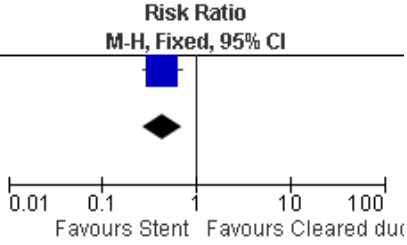
Heterogeneity: Not applicable
Test for overall effect: Z = 0.53 (P = 0.60)



Outcome 3: Additional intervention required (ERCP)

Study or Subgroup	Stent Events	Stent Total	Cleared duct Events	Cleared duct Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Chopra 1996	13	39	33	43	100.0%	0.43 [0.27, 0.70]
Total (95% CI)		**39**		**43**	**100.0%**	**0.43 [0.27, 0.70]**
Total events	13		33			

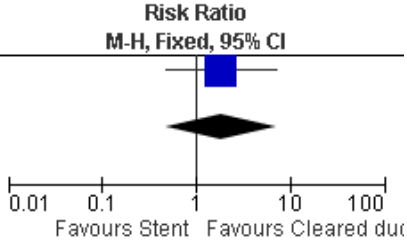
Heterogeneity: Not applicable
Test for overall effect: Z = 3.45 (P = 0.0006)



Outcomes 4: Additional intervention required (cholecystectomy)

Study or Subgroup	Stent Events	Stent Total	Cleared duct Events	Cleared duct Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Chopra 1996	5	39	3	43	100.0%	1.84 [0.47, 7.19]
Total (95% CI)		**39**		**43**	**100.0%**	**1.84 [0.47, 7.19]**
Total events	5		3			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.87 (P = 0.38)



Outcome 5: Length of stay

Not reported

H.7.4 Day case ERCP compared to planned inpatient ERCP

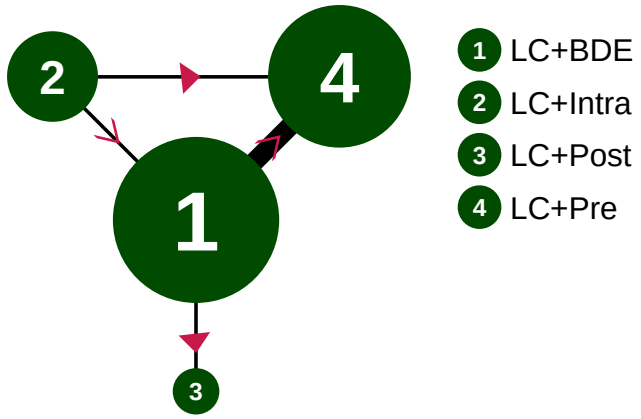
No evidence found

H.7.5 ERCP with laparoscopic cholecystectomy compared to bile duct exploration with laparoscopic cholecystectomy

Outcome 1: Length of stay

Random-effects model preferred to fixed-effects (not shown) because of superior fit to data (DIC = 15.386 versus 349.374).

Length of stay (days; loglogistic estimation) – evidence network



Size of nodes is proportional to total number of participants randomised to receive the treatment in question across the evidence-base. Width of connecting lines is proportional to number of trial-level comparisons available. Arrowheads indicate direction of effect in pairwise data (a > b denotes a is more effective than b) – filled arrowheads show comparisons where one option is significantly superior (p<0.05); outlined arrowheads show direction of trend where effect does not reach statistical significance.

Length of stay (days; loglogistic estimation) – input data

	LC+BDE	LC+Intra	LC+Post	LC+Pre
ElGeidie,A.A. et al. (2011)		1.30 (0.50)		3.00 (1.50)
Bansal,V.K. et al. (2010)	4.20 (1.50)			4.00 (2.25)
Rogers,S.J. et al. (2010)	5.30 (3.20)			6.60 (4.00)
Noble,H. et al. (2009)	5.00 (1.25)			3.00 (1.25)
Hong,D.F. et al. (2006)	4.66 (3.07)	4.25 (3.46)		
Cuschieri,A. et al. (1999)	7.09 (1.30)			10.63 (1.42)
Rhodes,M. et al. (1998)	1.00 (6.25)		3.50 (2.50)	

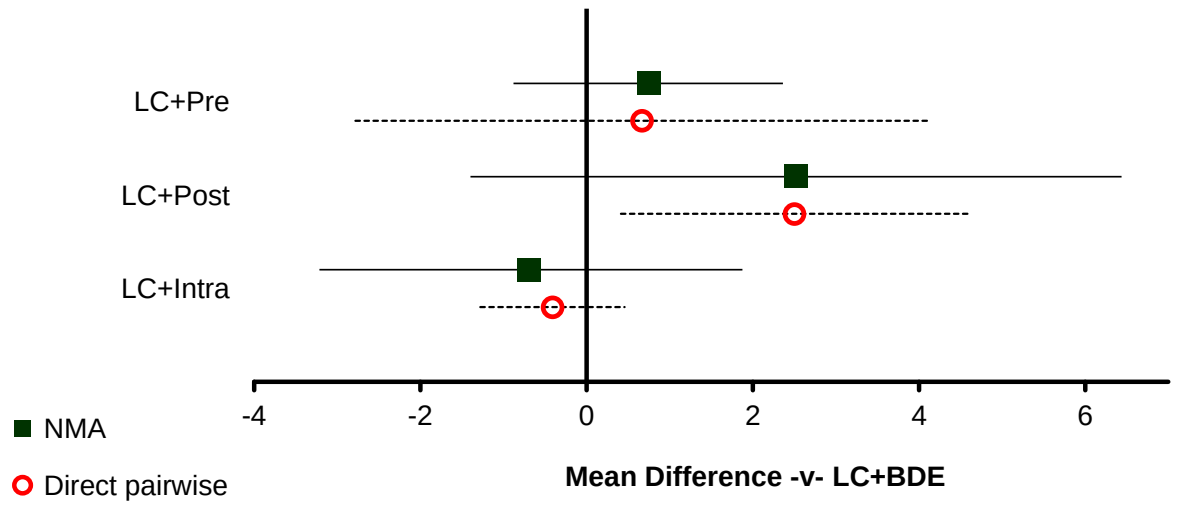
Values given are mean length of stay in days (SD)

Length of stay (days; loglogistic estimation) – relative effectiveness of all pairwise combinations

	LC +BDE	LC +Intra	LC +Post	LC +Pre
LC+BDE		-0.41 (-1.28, 0.46)	2.50 (0.41, 4.59)	0.66 (-2.78, 4.11)
LC+Intra	-0.68 (-3.21, 1.88)		-	1.70 (1.39, 2.01)
LC+Post	2.53 (-1.40, 6.44)	3.22 (-1.52, 7.86)		-
LC+Pre	0.75 (-0.88, 2.36)	1.44 (-1.09, 3.95)	-1.77 (-5.99, 2.48)	

Values given are mean differences.
The segment below and to the left of the shaded cells is derived from the network meta-analysis, reflecting direct and indirect evidence of treatment effects (row versus column). The point estimate reflects the median of the posterior distribution, and numbers in parentheses are 95% credible intervals. The segment above and to the right of the shaded cells gives pooled direct evidence (random-effects pairwise meta-analysis), where available (column versus row). Numbers in parentheses are 95% confidence intervals.

Length of stay (days; loglogistic estimation) – relative effect of all options versus common comparator

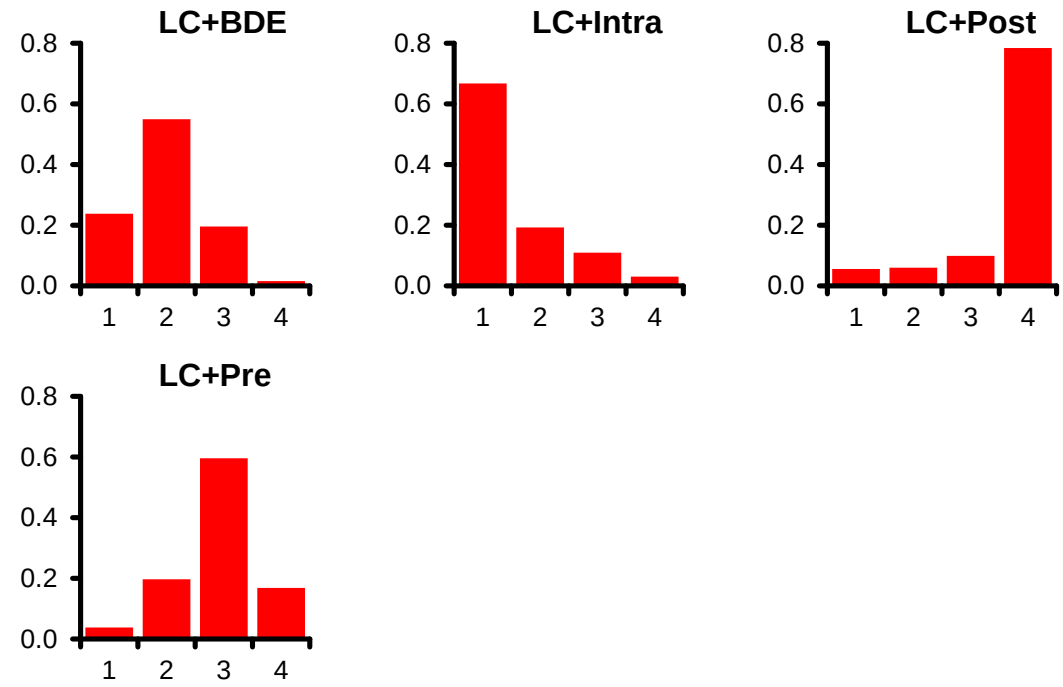


Values greater than 0 favour LC+BDE; values less than 0 favour the comparator treatment. Solid error bars are 95% credible intervals; dashed error bars are 95% confidence interval.

Length of stay (days; loglogistic estimation) – rankings for each comparator

	Probability best	Median rank (95%CI)
LC+BDE	0.239	2 (1, 3)
LC+Intra	0.668	1 (1, 4)
LC+Post	0.056	4 (1, 4)
LC+Pre	0.038	3 (1, 4)

Length of stay (days; loglogistic estimation) – rank probability histograms



Length of stay (days; loglogistic estimation) – model fit statistics

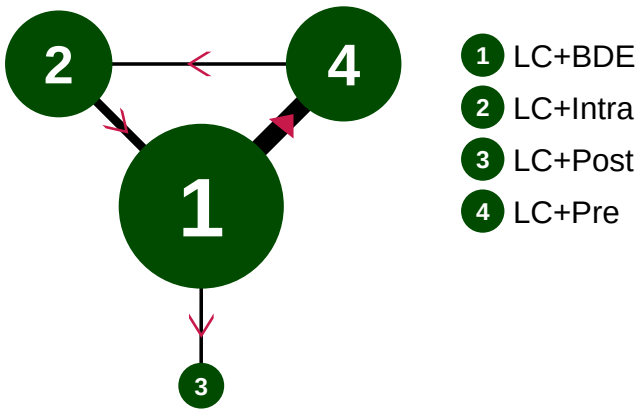
Residual deviance	Dbar	Dhat	pD	DIC	tau
13.84 (compared to 14 datapoints)	1.702	-11.981	13.684	15.386	1.693 (95%CI: 1.148, 1.985)

Outcome 2: Missed common bile duct stones

Fixed-effects model preferred over random-effects (not shown) as simpler and negligible difference in model fit (FE DIC = 66.092; RE DIC = 66.659).

0.5 added to zero cells in synthesis.

Missed CBDS – evidence network



Size of nodes is proportional to total number of participants randomised to receive the treatment in question across the evidence-base. Width of connecting lines is proportional to number of trial-level comparisons available. Arrowheads indicate direction of effect in pairwise data (a > b denotes a is more effective than b) –

filled arrowheads show comparisons where one option is significantly superior (p<0.05); outlined arrowheads show direction of trend where effect does not reach statistical significance.

Missed CBDS – input data

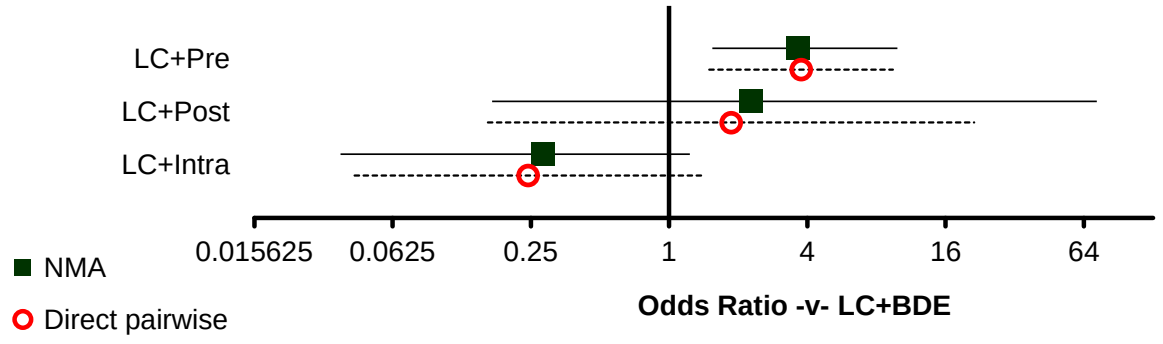
	LC+BDE	LC+Intra	LC+Post	LC+Pre
Ding,G. et al. (2014)	1/44			7/36
ElGeidie,A.A. et al. (2011)	2/97			9/95
ElGeidie,A.A. et al. (2011)	4/112	0/111		
Noble,H. et al. (2009)		0/90		0/100
Koc,B. et al. (2013)	2/57			3/54
Hong,D.F. et al. (2006)	3/141	1/93		
Nathanson,L.K. et al. (2005)	1/41		2/45	
Sgourakis,G. & (2002)	1/36			1/42

Missed CBDS – relative effectiveness of all pairwise combinations

	LC +BDE	LC +Intra	LC +Post	LC +Pre
LC+BDE		0.24 (0.04, 1.38)	1.86 (0.16, 21.32)	3.76 (1.49, 9.44)
LC+Intra	0.28 (0.04, 1.23)		-	0.90 (0.02, 45.85)
LC+Post	2.28 (0.17, 72.80)	8.88 (0.41, 429.40)		-
LC+Pre	3.64 (1.54, 9.86)	13.20 (2.43, 117.40)	1.59 (0.04, 25.28)	

Values given are odds ratios.
The segment below and to the left of the shaded cells is derived from the network meta-analysis, reflecting direct and indirect evidence of treatment effects (row versus column). The point estimate reflects the median of the posterior distribution, and numbers in parentheses are 95% credible intervals. The segment above and to the right of the shaded cells gives pooled direct evidence (random-effects pairwise meta-analysis), where available (column versus row). Numbers in parentheses are 95% confidence intervals.

Missed CBDS – relative effect of all options versus common comparator

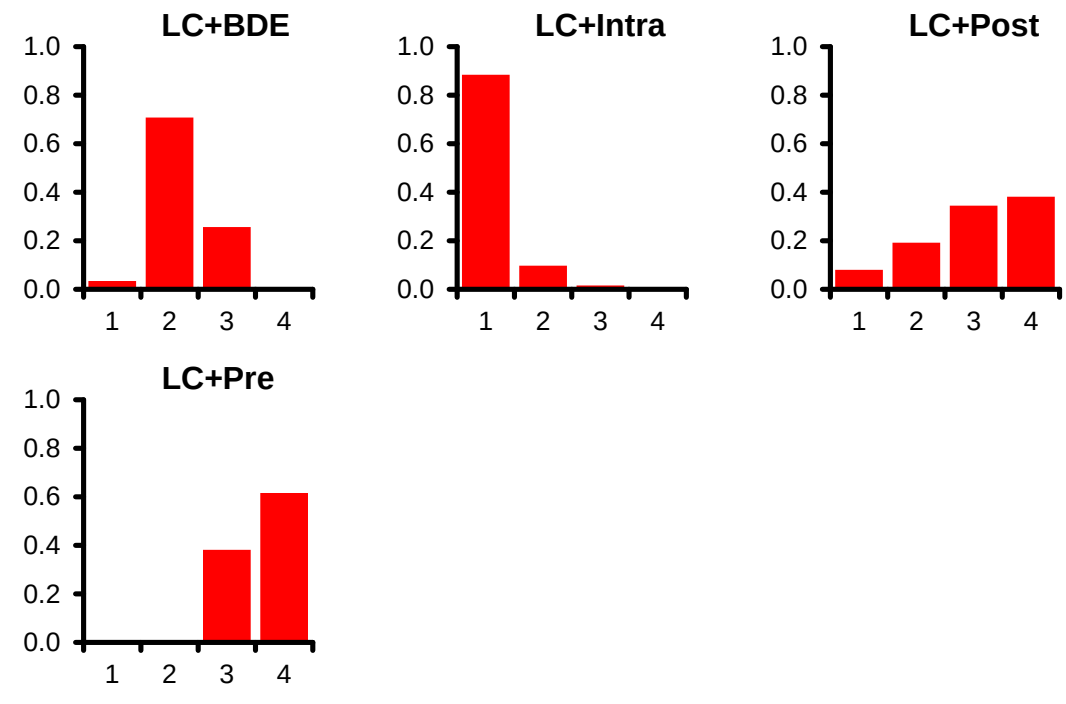


Values greater than 1 favour LC+BDE; values less than 1 favour the comparator treatment. Solid error bars are 95% credible intervals; dashed error bars are 95% confidence interval.

Missed CBDS – rankings for each comparator

	Probability best	Median rank (95%CI)
LC+BDE	0.035	2 (1, 3)
LC+Intra	0.885	1 (1, 2)
LC+Post	0.080	3 (1, 4)
LC+Pre	0.000	4 (3, 4)

Missed CBDS – rank probability histograms



Missed CBDS – model fit statistics

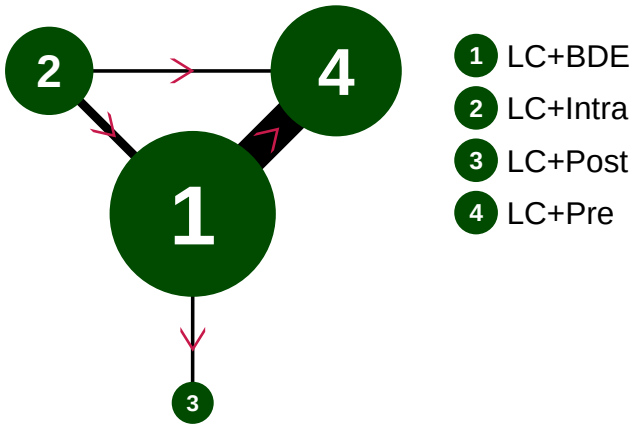
Residual deviance	Dbar	Dhat	pD	DIC
16.82 (compared to 16 datapoints)	55.579	45.066	10.513	66.092

Outcome 3: Failed procedure

Random-effects model preferred to fixed-effects (not shown) because of somewhat improved fit to data (DIC = 110.143 versus 115.052).

0.5 added to zero cells in synthesis.

Failed procedure – evidence network



Size of nodes is proportional to total number of participants randomised to receive the treatment in question across the evidence-base. Width of connecting lines is proportional to number of trial-level comparisons available. Arrowheads indicate direction of effect in pairwise data (a > b denotes a is more effective than b) – filled arrowheads show comparisons where one option is significantly superior (p<0.05); outlined arrowheads show direction of trend where effect does not reach statistical significance.

Failed procedure – input data

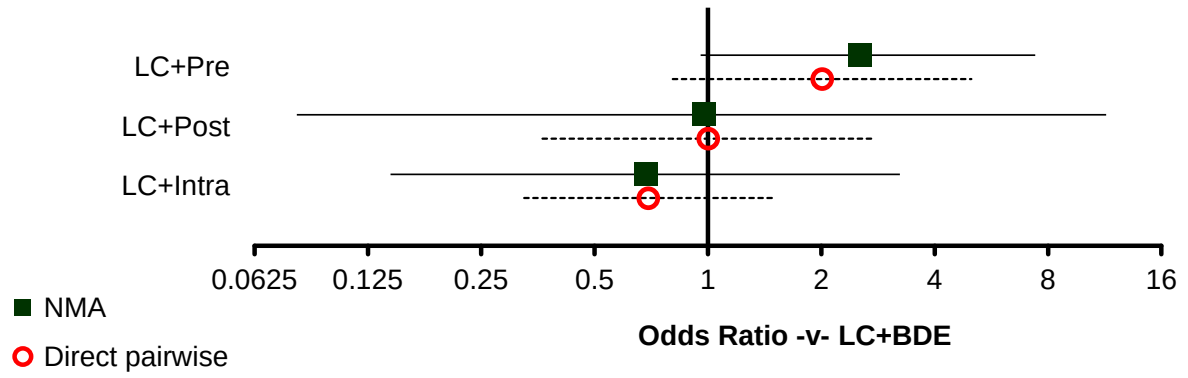
	LC+BDE	LC+Intra	LC+Post	LC+Pre
Ding,G. et al. (2014)	0/44			14/47
ElGeidie,A.A. et al. (2011)	7/110			6/111
ElGeidie,A.A. et al. (2011)	6/115	3/111		
Bansal,V.K. et al. (2010)		2/98		5/93
Rogers,S.J. et al. (2010)	1/15			4/15
Noble,H. et al. (2009)	2/57			1/55
Koc,B. et al. (2013)	2/57			3/54
Hong,D.F. et al. (2006)	15/141	8/93		
Sgourakis,G. & (2002)	4/28			5/32
Cuschieri,A. et al. (1999)	1/133			7/136
Rhodes,M. et al. (1998)	10/40		10/40	

Failed procedure – relative effectiveness of all pairwise combinations

	LC +BDE	LC +Intra	LC +Post	LC +Pre
LC+BDE		0.69 (0.32, 1.48)	1.00 (0.36, 2.75)	2.01 (0.81, 5.00)
LC+Intra	0.68 (0.14, 3.23)		-	2.73 (0.52, 14.42)
LC+Post	0.98 (0.08, 11.41)	1.44 (0.08, 26.99)		-
LC+Pre	2.54 (0.96, 7.40)	3.72 (0.73, 21.02)	2.58 (0.19, 39.89)	

Values given are odds ratios.
The segment below and to the left of the shaded cells is derived from the network meta-analysis, reflecting direct and indirect evidence of treatment effects (row versus column). The point estimate reflects the median of the posterior distribution, and numbers in parentheses are 95% credible intervals. The segment above and to the right of the shaded cells gives pooled direct evidence (random-effects pairwise meta-analysis), where available (column versus row). Numbers in parentheses are 95% confidence intervals.

Failed procedure – relative effect of all options versus common comparator

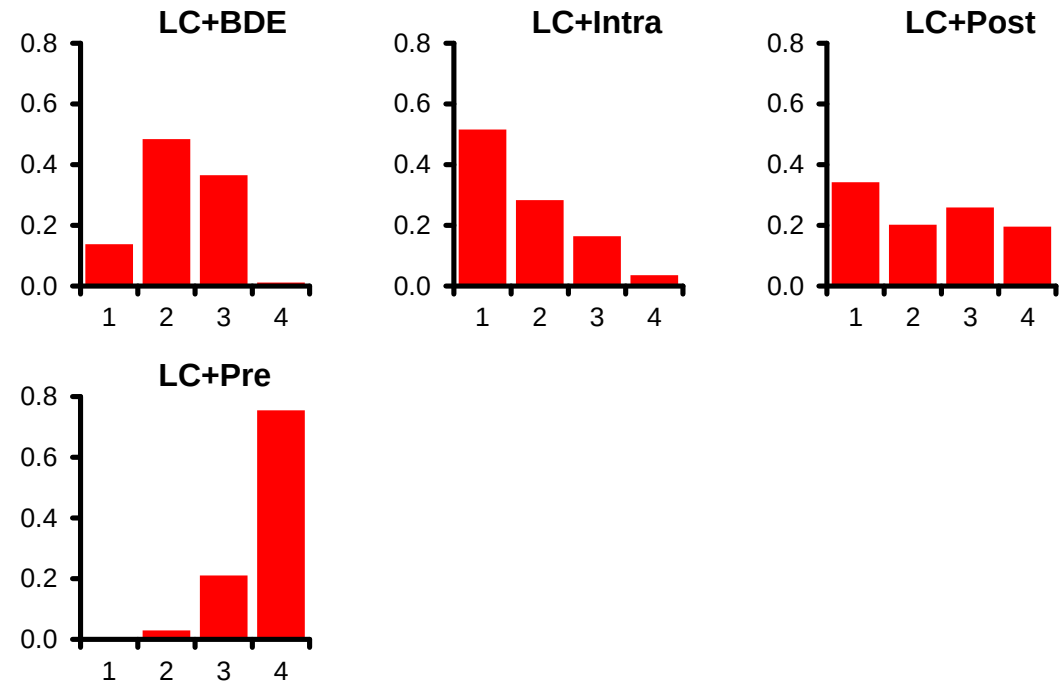


Values greater than 1 favour LC+BDE; values less than 1 favour the comparator treatment. Solid error bars are 95% credible intervals; dashed error bars are 95% confidence interval.

Failed procedure – rankings for each comparator

	Probability best	Median rank (95%CI)
LC+BDE	0.138	2 (1, 3)
LC+Intra	0.516	1 (1, 4)
LC+Post	0.342	2 (1, 4)
LC+Pre	0.004	4 (2, 4)

Failed procedure – rank probability histograms



Failed procedure – model fit statistics

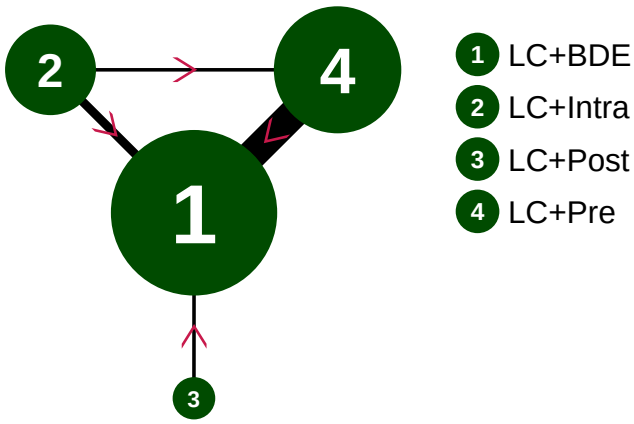
Residual deviance	Dbar	Dhat	pD	DIC	tau
22.71 (compared to 22 datapoints)	91.416	72.69	18.726	110.143	0.973 (95%CI: 0.172, 1.877)

Outcome 4: Conversion to open surgery

Random-effects model preferred to fixed-effects (not shown) because of somewhat improved fit to data (DIC = 91.58 versus 95.091).

0.5 added to zero cells in synthesis.

Conversion to open surgery – evidence network



Size of nodes is proportional to total number of participants randomised to receive the treatment in question across the evidence-base. Width of connecting lines is proportional to number of trial-level comparisons available. Arrowheads indicate direction of effect in pairwise data (a > b denotes a is more effective than b) –

filled arrowheads show comparisons where one option is significantly superior (p<0.05); outlined arrowheads show direction of trend where effect does not reach statistical significance.

Conversion to open surgery – input data

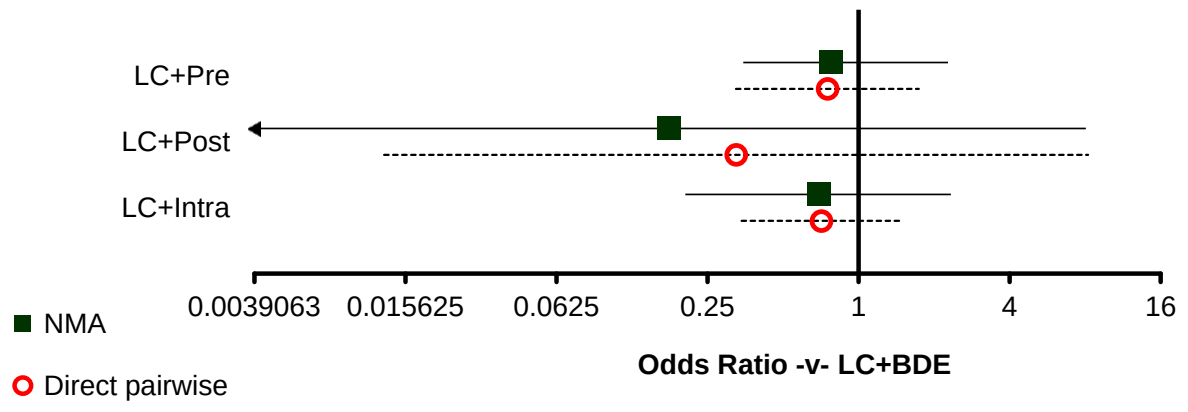
	LC+BDE	LC+Intra	LC+Post	LC+Pre
Ding,G. et al. (2014)	4/44			2/47
ElGeidie,A.A. et al. (2011)	3/110			1/111
ElGeidie,A.A. et al. (2011)	7/115	4/111		
Bansal,V.K. et al. (2010)		2/91		2/85
Noble,H. et al. (2009)	1/15			2/15
Koc,B. et al. (2013)	0/57			1/54
Hong,D.F. et al. (2006)	15/141	8/93		
Sgourakis,G. & (2002)	1/36			5/42
Cuschieri,A. et al. (1999)	17/133			8/133
Rhodes,M. et al. (1998)	1/40		0/40	

Conversion to open surgery – relative effectiveness of all pairwise combinations

	LC +BDE	LC +Intra	LC +Post	LC +Pre
LC+BDE		0.71 (0.34, 1.48)	0.33 (0.01, 8.22)	0.75 (0.32, 1.74)
LC+Intra	0.69 (0.20, 2.33)		-	1.07 (0.15, 7.79)
LC+Post	0.18 (0.00, 8.04)	0.25 (0.00, 13.83)		-
LC+Pre	0.78 (0.35, 2.27)	1.13 (0.32, 5.35)	4.54 (0.10, 2560.00)	

Values given are odds ratios.
The segment below and to the left of the shaded cells is derived from the network meta-analysis, reflecting direct and indirect evidence of treatment effects (row versus column). The point estimate reflects the median of the posterior distribution, and numbers in parentheses are 95% credible intervals. The segment above and to the right of the shaded cells gives pooled direct evidence (random-effects pairwise meta-analysis), where available (column versus row). Numbers in parentheses are 95% confidence intervals.

Conversion to open surgery – relative effect of all options versus common comparator

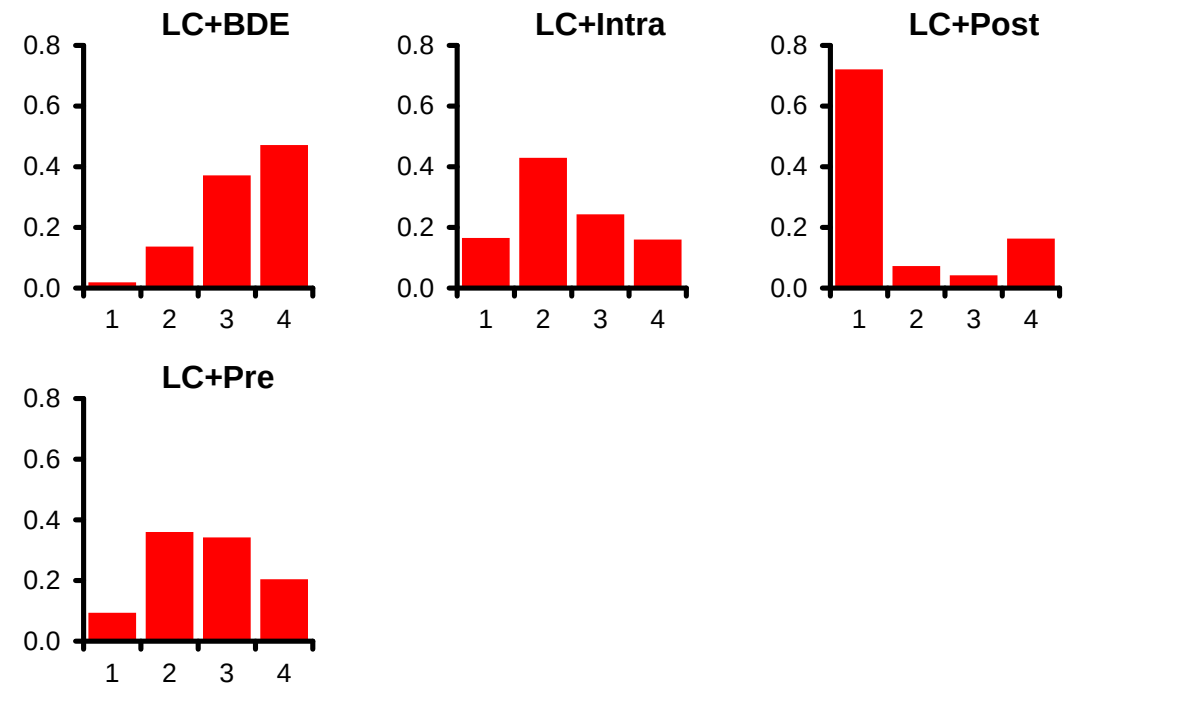


Values greater than 1 favour LC+BDE; values less than 1 favour the comparator treatment. Solid error bars are 95% credible intervals; dashed error bars are 95% confidence interval.

Conversion to open surgery – rankings for each comparator

	Probability best	Median rank (95%CI)
LC+BDE	0.019	3 (2, 4)
LC+Intra	0.166	2 (1, 4)
LC+Post	0.722	1 (1, 4)
LC+Pre	0.094	3 (1, 4)

Conversion to open surgery – rank probability histograms



Conversion to open surgery – model fit statistics

Residual deviance	Dbar	Dhat	pD	DIC	tau
19.86	76.68	61.781	14.9	91.58	0.542 (95%CI: 0.010, 1.692)

Residual deviance	Dbar	Dhat	pD	DIC	tau
(compared to 20 datapoints)					

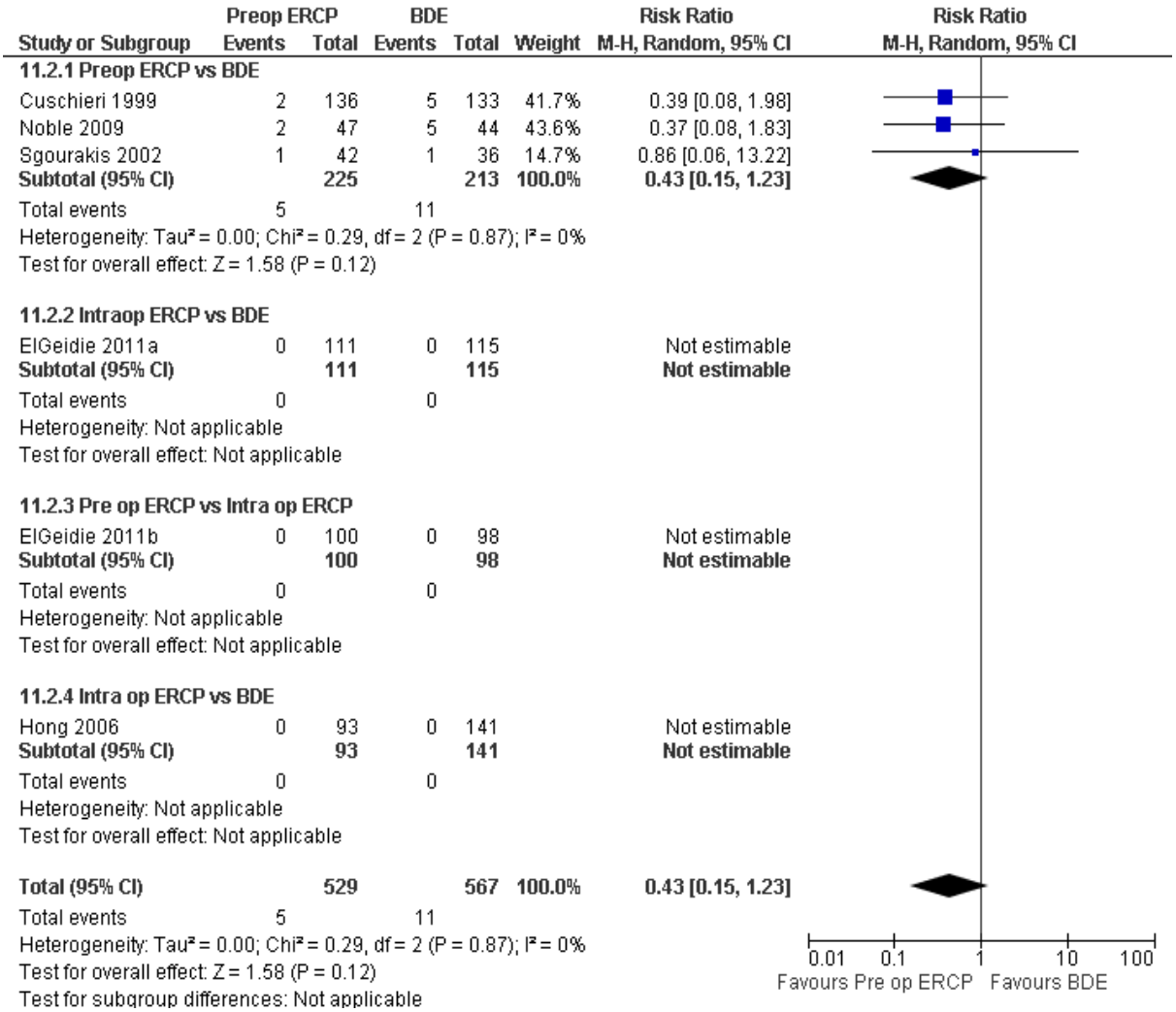
Outcome 5: More than 1 ERCP required to clear bile duct

Pre operative ERCP- Bansal 2/15, Cuscheri 7/150 = 5% overall

Intra operative ERCP- not reported

Post operative ERCP- Nathanson 11/45, Rhodes 7/40 = 21% overall

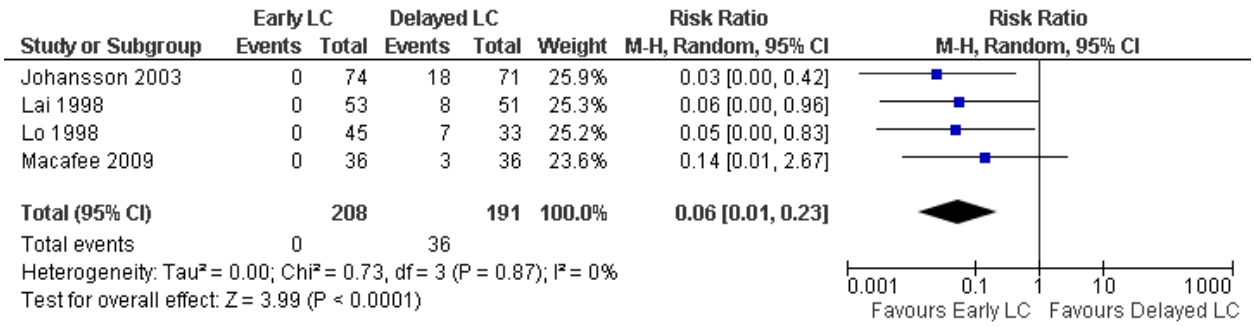
Outcome 6: Mortality



H.8 Review question 5 Timing of intervention

H.8.1 Early laparoscopic cholecystectomy compared to delayed laparoscopic cholecystectomy for acute cholecystitis.

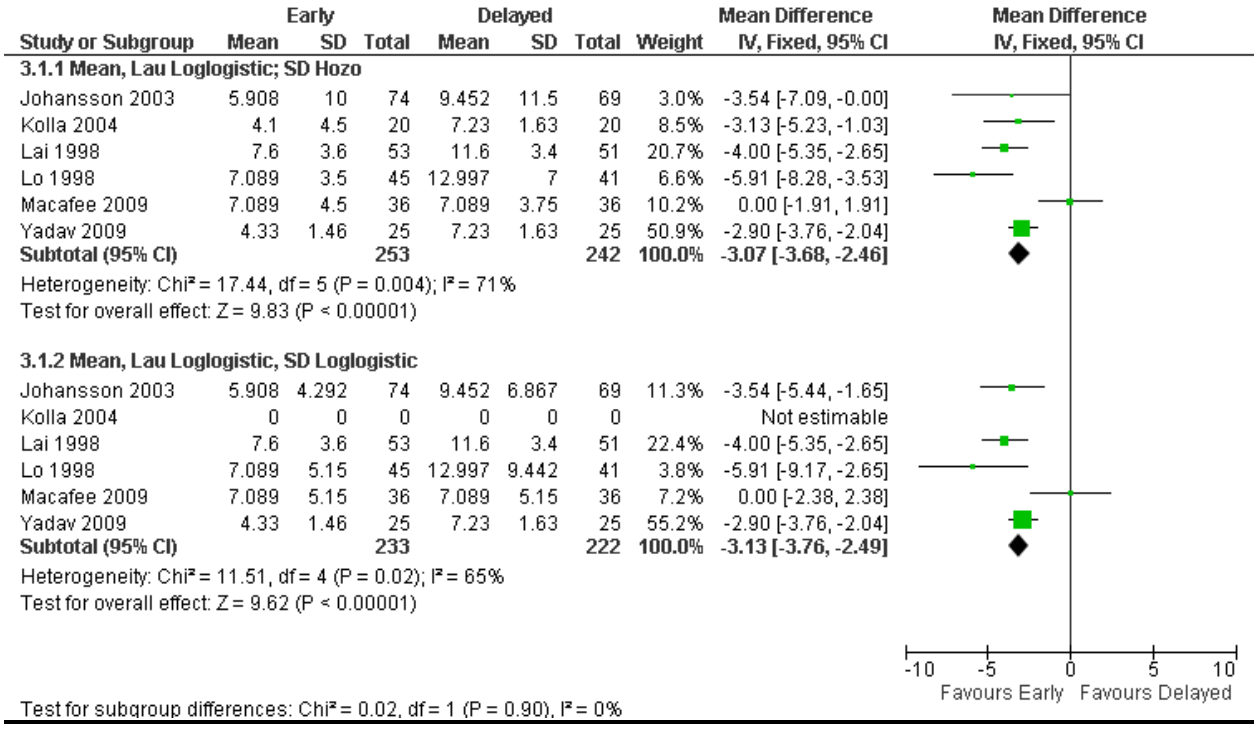
Outcome 1: Readmission due to symptoms



Outcome 2: Readmission due to surgical complications

Not reported

Outcome 3: Length of stay, with sensitivity analysis for methods for calculating Mean and Standard Deviation (Lau Loglogistic with Hozo SD used in final analysis)

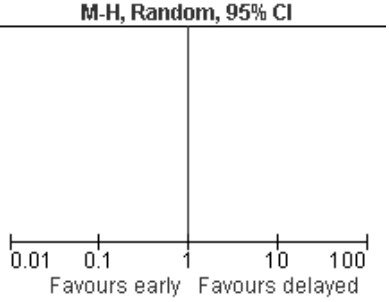


Outcome 4: Mortality

This outcome was reported by all four included studies, but no deaths were observed in any arm in any study.

Study or Subgroup	Early LC Events	Total	Delayed LC Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Johansson 2003	0	74	0	71		Not estimable
Kolla 2004	0	20	0	20		Not estimable
Lai 1998	0	53	0	51		Not estimable
Lo 1998	0	45	0	41		Not estimable
Total (95% CI)		**192**		**183**		**Not estimable**
Total events	0		0			

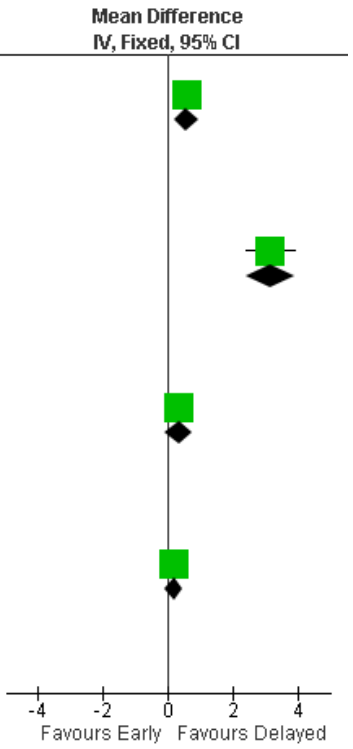
Heterogeneity: Not applicable
Test for overall effect: Not applicable



Outcome 5: Quality of life

Study or Subgroup	Early Mean	SD	Total	Delayed Mean	SD	Total	Weight	Mean Difference IV, Fixed, 95% CI
6.4.1 1 hour								
Gul 2013	2.2	0.847	30	1.63	0.556	30	100.0%	0.57 [0.21, 0.93]
Subtotal (95% CI)			**30**			**30**	**100.0%**	**0.57 [0.21, 0.93]**
Heterogeneity: Not applicable								
Test for overall effect: Z = 3.08 (P = 0.002)								
6.4.2 12 hours								
Gul 2013	7.1	1.863	30	3.93	1.048	30	100.0%	3.17 [2.41, 3.93]
Subtotal (95% CI)			**30**			**30**	**100.0%**	**3.17 [2.41, 3.93]**
Heterogeneity: Not applicable								
Test for overall effect: Z = 8.12 (P < 0.00001)								
6.4.3 24 hours								
Gul 2013	2.83	0.834	30	2.5	0.861	30	100.0%	0.33 [-0.10, 0.76]
Subtotal (95% CI)			**30**			**30**	**100.0%**	**0.33 [-0.10, 0.76]**
Heterogeneity: Not applicable								
Test for overall effect: Z = 1.51 (P = 0.13)								
6.4.4 48 hours								
Gul 2013	1.71	0.488	30	1.52	0.574	30	100.0%	0.19 [-0.08, 0.46]
Subtotal (95% CI)			**30**			**30**	**100.0%**	**0.19 [-0.08, 0.46]**
Heterogeneity: Not applicable								
Test for overall effect: Z = 1.38 (P = 0.17)								

Test for subgroup differences: Chi² = 52.63, df = 3 (P < 0.00001), I² = 94.3%



H.8.2 Early compared to delayed laparoscopic cholecystectomy after ERCP for common bile duct stones.

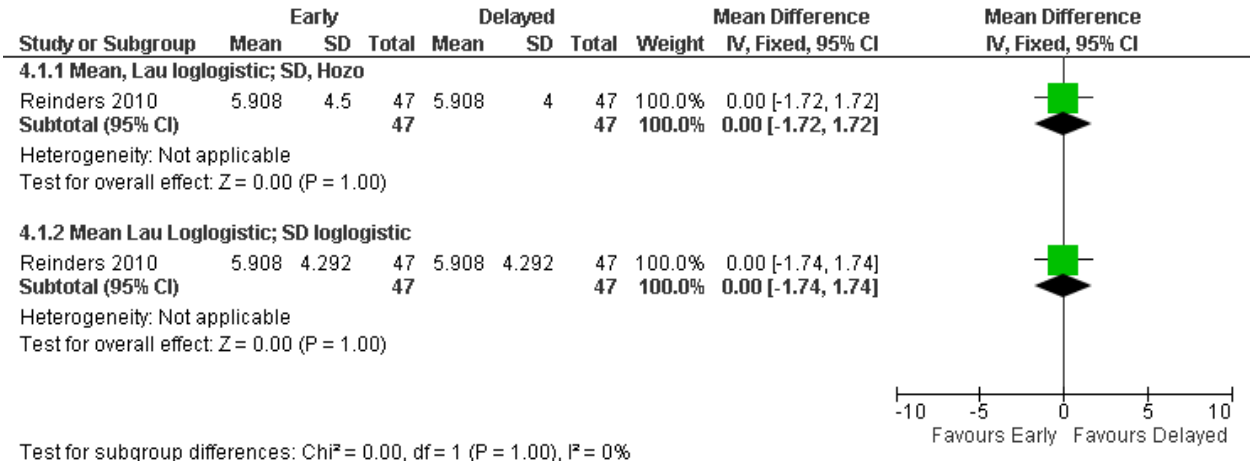
Outcome 1: Readmission due to symptoms

Not reported

Outcome 2: Readmission due to surgical complications

Not reported

Outcome 3: Length of stay, with sensitivity analysis for methods for calculating Mean and Standard Deviation (Lau Loglogistic with Hozo SD used in final analysis)



Outcome 4: Mortality

This outcome was reported but zero events happened in both arms.

Outcome 5: Quality of life

Not reported

H.9 Review question 6 Patient information

Themes

- Diet
  - 83% said they received no post-operative dietary advice, yet many were able to state foods that were best avoided. (Blay, 2006)
  - 13% requested additional information on diet (Blay, 2006)
  - 4/23 patients requested additional information on diet (Blay, 2005)
- Pain
  - 7/23 patients requested more information on pain management (Blay, 2005)
- Wounds
  - Respondents had many questions about how their wounds should be cared for and how the wounds should normally look (Barthelsson, 2003)
  - 5/23 patients requested more information about wounds (Blay, 2005)
- Resuming activity
  - 65% of patients had not been told about how long it would take to resume normal activities. (Blay, 2006)
  - 2/23 patients requested additional information on activity (Blay, 2005)
  - 6% of patients requested additional information on post operative activity (Blay 2006)
- Waiting for elective surgery
  - Some patients resign themselves to the wait, whereas others attempt to speed up treatment, look for information on the disease or treatment alternatives, or seek reassurance from relatives or care providers. (Hilkhuysen, 2005)
- General information
  - 14% said they received no information from PAC nurse (Blay, 2006)
  - Several respondents had no memory of the information given by the surgeon on discharge from hospital (Barthelsson, 2003)
  - Patients were not given definitive advice on how long they should expect to be in hospital. (Blay, 2006)
  - Patient's knowledge of the disease and its natural course was considered to be important, as sufficient knowledge would prevent patients from restricting themselves unnecessarily, or experiencing unreasonable distress. (Hilkhuysen, 2005)
  - Patients requested additional information on diet, self care after discharge, general preoperative information, postoperative activity, pain management, medical terminology. (Blay, 2006)
  - Patients requested additional information on general information, wounds, pain management, dietary advice, bowel management, nausea and vomiting, activity, medications. (Blay, 2005)
  - 31% of patients with internet access used it to acquire additional information about their operations and 58% used internet search engines to acquire additional information (Tamahankar, 2009)
  - Of the people who searched the internet regarding their operations, 79% rated the information they found as good or very good. 23% were confused or worried about by the information they received (Tamahankar, 2009)
  - 31% of people who received routine information would have liked extra information, 36% of people who received routine information plus an information sheet would have

liked extra information- study doesn't state what information they wanted to receive. (King, 2004)