

Methods for Drainage of Distal Malignant Biliary Obstruction after ERCP Failure: A Systematic Review and Network Meta-Analysis

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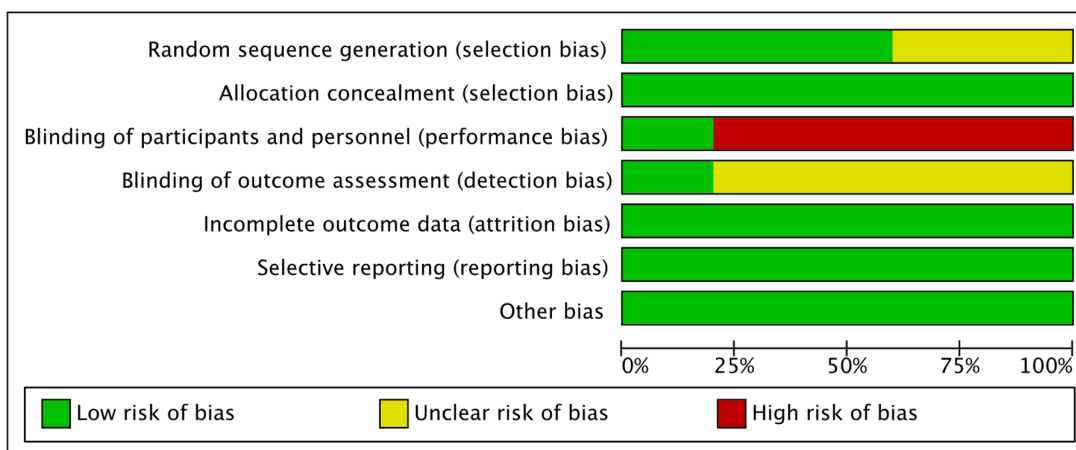


Figure S1. Risk of bias graph of the included trials.

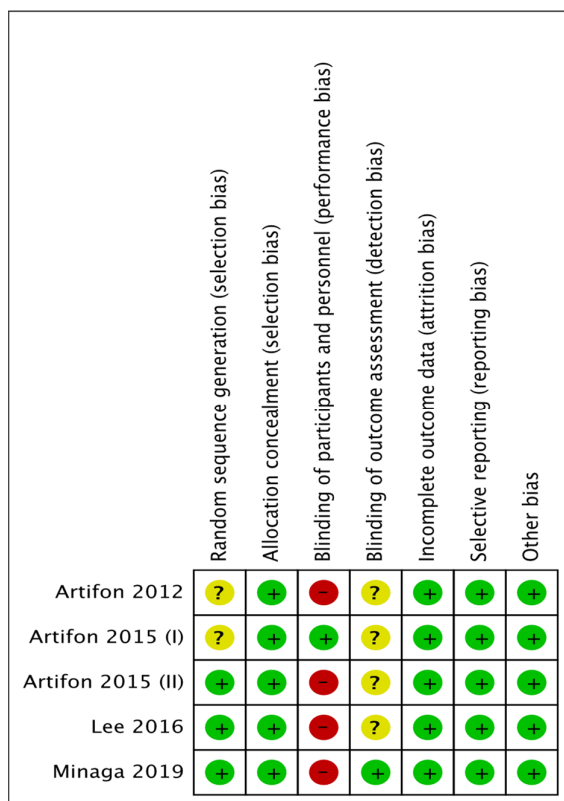


Figure S2. Risk of bias summary of the included trials.

Table S1. Results of network meta-analysis concerning technical success rate and moderate/severe adverse event rate.

	Technical success rate		Moderate-Severe adverse event rate	
	Risk Ratio (95% CI)	Quality of Evidence	Risk Ratio (95% CI)	Quality of Evidence
All treatments vs. PTBD				
EUS-CD	1.02 (0.96-1.08)	Low	0.45 (0.21-2.03)	Low
EUS-HG	1.03 (0.97-1.09)	Low	0.35 (0.18-1.47)	Low
Surgery	1.09 (0.87-1.38)	Low	0.50 (0.10-3.52)	Low
vs. EUS-CD				
EUS-HG	1.01 (0.93-1.09)	Low	0.54 (0.26-1.88)	Low
Surgery	1.07 (0.85-1.34)	Low	1.26 (0.22-3.91)	Low
vs. EUS-HG				
Surgery	1.06 (0.83-1.34)	Low	1.75 (0.16-5.03)	Low

Abbreviations: EUS-CD, Endoscopic ultrasound choledochoduodenostomy; EUS-HG, Endoscopic ultrasound hepatico-gastrostomy; PTBD, Percutaneous trans-hepatic biliary drainage.

Table S2. SUCRA ranking of treatments for technical success rate and moderate/severe adverse event rate.

Technical success rate		Moderate-severe adverse event rate	
Surgery	0.54	EUS-HG	0.62
EUS-HG	0.47	EUS-CD	0.51
EUS-CD	0.36	Surgery	0.48
PTBD	0.31	PTBD	0.18

Abbreviations: EUS-CD, Endoscopic ultrasound choledochoduodenostomy; EUS-HG, Endoscopic ultrasound hepatico-gastrostomy; PTBD, Percutaneous trans-hepatic biliary drainage.

Table S3. Pooled incidence of different adverse events in the included trials.

Adverse Event	EUS-CD						PTBD			Surgical hepato-jejunostomy		EUS-HG		
	Artifon 2012	Artifon 2015	Lee 2016 (I)	Minaga 2019	Artifon 2015 (II)	Overall	Artifon 2012	Lee 2016	Overall	Artifon 2015	Lee 2016 (II)	Minaga 2019	Artifon 2015 (II)	Overall
Bleeding	0 (0%)	1 (6.2%)	0 (0%)	0 (0%)	1 (4.1%)	3.4% (0%-7.3%)	1 (8.3%)	3 (9.3%)	9.1% (0.6%-17.6%)	1 (6.2%)	0 (0%)	0 (0%)	3 (12%)	2.9% (0%-6.9%)
Perforation	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (4.1%)	3.1% (0%-6.7%)	0 (0%)	0 (0%)	0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0%
Stent migration	0 (0%)	1 (6.2%)	0 (0%)	0 (0%)	0 (0%)	2.8% (0%-6.2%)	0 (0%)	0 (0%)	0%	0 (0%)	0 (0%)	1 (4.1%)	0 (0%)	2.4% (0%-5.8%)
Acute pancreatitis	0 (0%)	0 (0%)	1 (12.5%)	1 (4.3%)	0 (0%)	3.1% (0%-6.8%)	0 (0%)	0 (0%)	0%	0 (0%)	1 (4%)	0 (0%)	0 (0%)	2.4% (0%-5.8%)