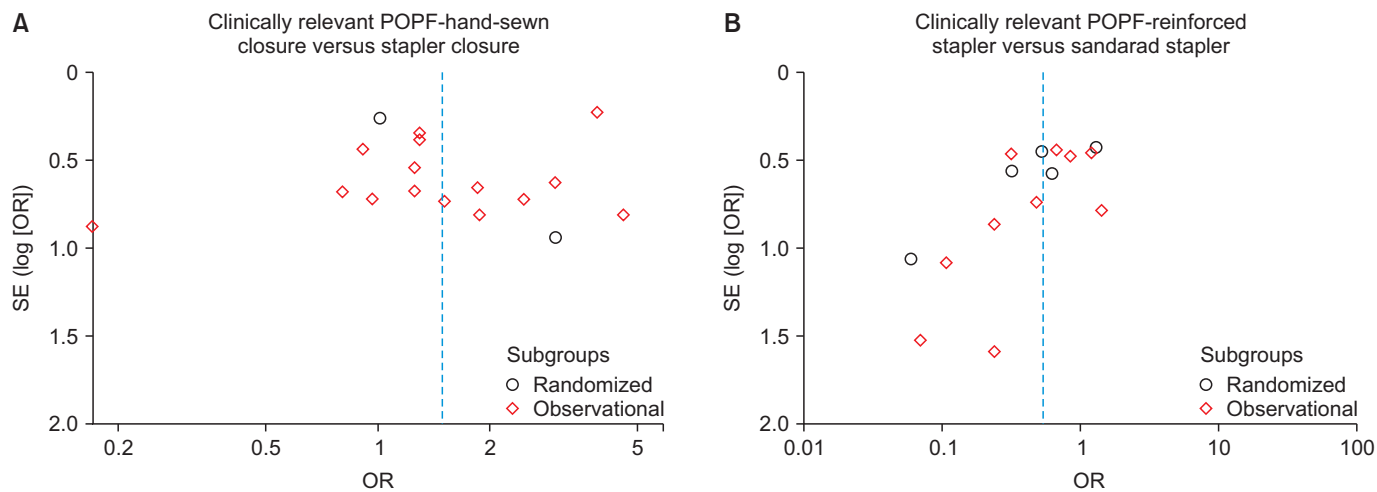


Supplementary Table 1. Summary table of findings following GRADE methodology assessment

No. of study	Study design	Certainty assessment				No. of patient		Effect		Certainty	Importance	
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other consideration	Stapler	Hand-sewn	Relative (95% CI)			Absolute (95% CI)
Question: Hand-sewn compared to stapler												
Clinically significant POPF - Randomized												
2	Randomized trials	Serious ^{a)}	Not serious	Not serious	Serious ^{b)}	All plausible residual confounding would reduce the demonstrated effect	41/190 (21.6%)	38/191 (19.9%)	OR 1.20 (0.56 to 2.58)	31 more per 1,000 (from 77 fewer to 192 more)	⊕⊕⊕○ Moderate	CRITICAL
Clinically significant POPF - Observational												
18	Observational studies	Not serious	Not serious	Not serious	Not serious	All plausible residual confounding would reduce the demonstrated effect	289/994 (29.1%)	204/1,060 (19.2%)	OR 1.59 (1.06 to 2.41)	82 more per 1,000 (from 9 more to 172 more)	⊕⊕⊕○ Moderate	CRITICAL
Question: Reinforcement compared to standard stapler												
Clinically significant POPF - Randomized												
5	Randomized trials	Serious ^{a)}	Not serious	Not serious	Not serious	None	36/315 (11.4%)	61/307 (19.9%)	OR 0.50 (0.24 to 1.08)	88 fewer per 1,000 (from 143 fewer to 13 more)	⊕⊕⊕○ Moderate	CRITICAL
Clinically significant POPF - Observational												
10	Observational studies	Not serious	Not serious	Not serious	Not serious	Strong association	80/599 (13.4%)	79/366 (21.6%)	OR 0.55 (0.34 to 0.90)	84 fewer per 1,000 (from 130 fewer to 17 fewer)	⊕⊕⊕○ Moderate	CRITICAL

CI, confidence interval; OR, odds ratio; POPF, postoperative pancreatic fistula.

^{a)}Performance bias, ^{b)}wide confidence interval.



Supplementary Fig. 1. Funnel plots of comparison of (A) clinically relevant POPF: hand-sewn closure versus stapler closure, (B) clinically relevant POPF: reinforced stapler versus sandarad stapler. POPF, postoperative pancreatic fistula; OR, odds ratio; SE, standard error.