

Table S1: Univariate meta-regression results for surgical procedure (Mixed-Effects Model)

Variables		Estimate	SE	Z value	P value	tau ²	I ²	R ²	Test of Moderators
Surgical procedure	Appendectomy	Ref	-	-	-	0.48	99.16%	31.17%	QM (df=7)=40.44, P=0.001**
	Bowel surgery	0.65	0.29	2.24	0.025*				
	Caesarean and gynecological surgery	0.15	0.31	0.47	0.63				
	Cholecystectomy	-1.17	0.48	-2.4	0.016*				
	Gastric surgery	-0.46	0.45	-1.012	0.3				
	Liver Transplantation	1.52	0.41	3.73	<0.001**				
	Mixed abdominal surgery	0.52	0.3	1.72	0.086				
	Pancreatic surgery	0.86	0.48	1.8	0.072				
WHO-regions	AFRO	Ref	-	-	-	0.64	99.40%	6.79%	QM (df=6)=11.74, P=0.06
	AMRO	-0.31	0.35	-0.90	0.36				
	EMRO	0.03	0.87	0.03	0.97				
	EURO	0.97	0.35	-1.30	0.19				
	SEARO	-1.89	0.65	-2.89	0.003*				
	WPRO	-0.67	0.37	-1.80	0.07				
	International studies	-0.95	0.56	-1.70	0.08				
Income-group	High-income	Ref	-	-	-	0.71	99.51%	0.00%	QM (df=4)=2.06, P=0.72
	Upper-middle-income	0.20	0.24	0.82	0.41				
	Lower-middle-income	0.06	0.40	0.15	0.87				
	Low-income	0.59	0.51	1.16	0.24				
	International studies	0.30	0.50	0.60	0.54				

*P<0.05; **P<0.001; AMRO: Region of the Americas; EMRO: Eastern Mediterranean Region; EURO: European Region; SEARO: South-East Asia Region; WPRO: Western Pacific Region